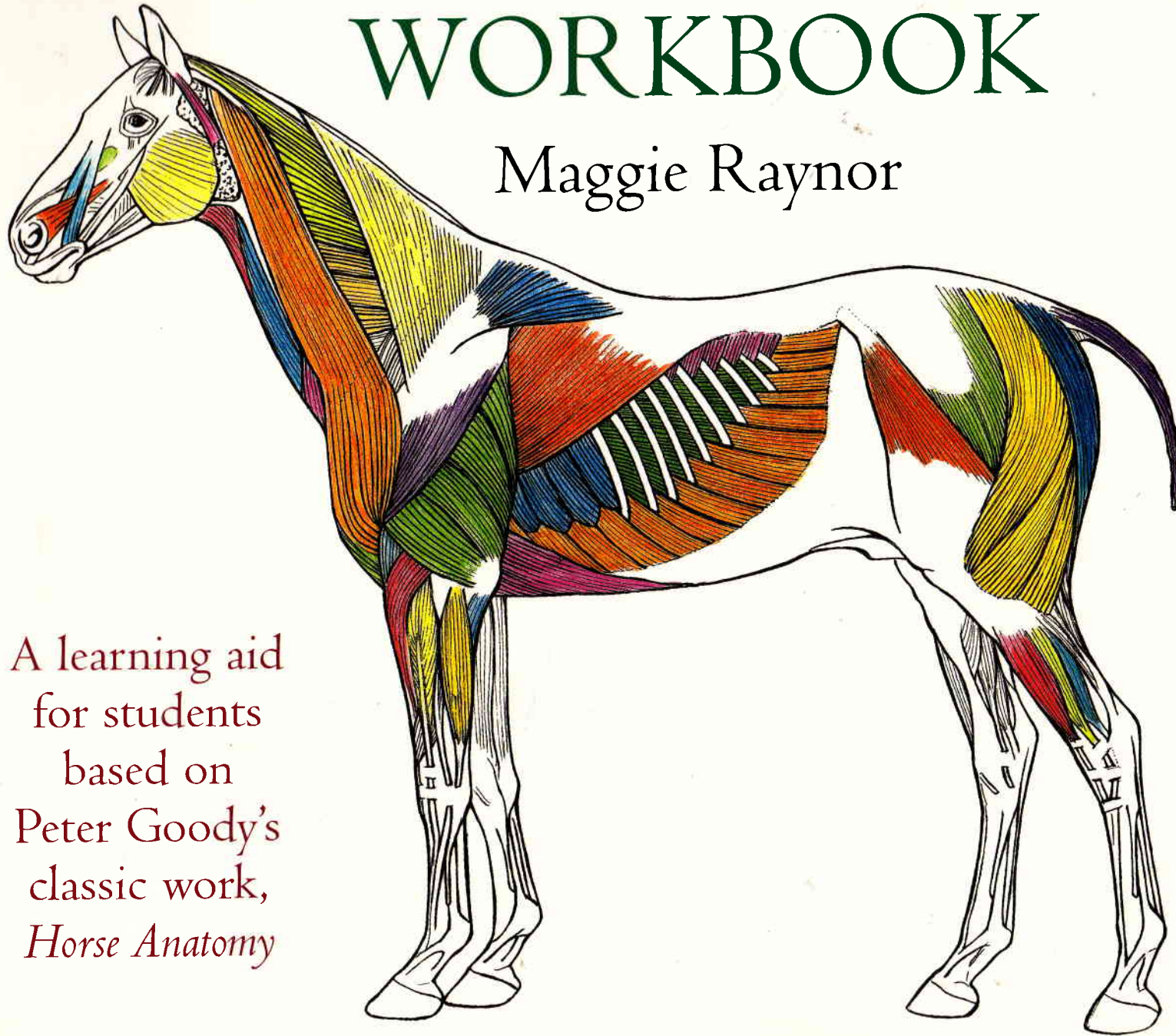


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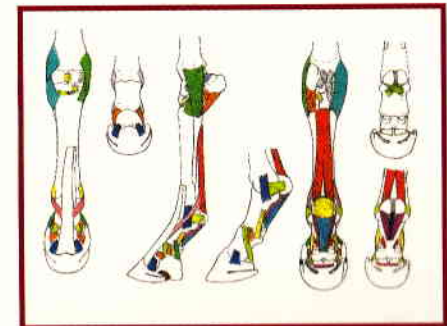
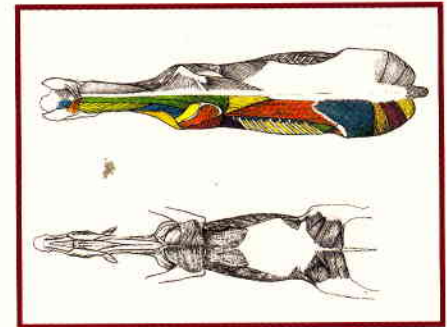
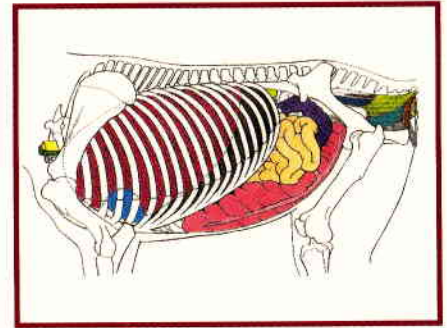
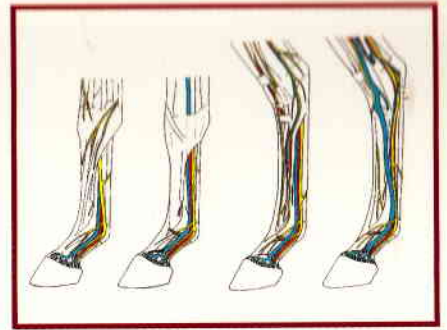
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The HORSE ANATOMY WORKBOOK

Maggie Raynor



A learning aid
for students
based on
Peter Goody's
classic work,
Horse Anatomy



The HORSE ANATOMY WORKBOOK

A learning aid for students based on
Peter Goody's classic work, *Horse Anatomy*

Maggie Raynor

J. A. ALLEN
LONDON

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How to use this book

The purpose of this book is to act as a study tool, to help you familiarize yourself with, and commit to memory, the horse's anatomy.

Each double page spread consists of two elements – the figure (a drawing, or set of drawings) and the accompanying text. In some of the skeletal drawings, bones are separated to provide additional views of joint surfaces, etc. The text consists of a list of features to be coloured or labelled on the drawing(s). Where the overall figure consists of more than one drawing, the text (and instructions) may be modified to take account of this. Some general points to bear in mind are:

- In some cases, different parts of an anatomical feature may be visible at more than one point on a drawing, in which case its number may appear more than once on that drawing.
- Where there are two or more drawings to an overall figure, these drawings will often contain *different views of the same structure*. In such cases, the instructions given will be common to all the relevant drawings, e.g. 'On all drawings on which they occur, identify and colour the following.'
- In other cases, a figure may consist of two (or more) drawings, with *different features individually numbered on each* – i.e. part I on fig.(a) will be a different structure from part I on fig.(b). Where this occurs, the colouring instructions on the text page will appear under the relevant sub-headings.

Some structures (for example, some ligaments) occur in pairs. In some views, both structures will be visible. However, to avoid over-cluttering the drawings, only one of the pair may be numbered and arrowed (for example, with some views of medial and lateral collateral ligaments, only one may be identified). In line with the convention in Goody's Horse Anatomy, and for reasons of consistency, such structures are

always referred to in the terms 'medial and lateral...'; whether the actual structure labelled is, in fact, medial or lateral, will depend on the orientation of the drawings.

Colouring

Each structure to be coloured on the drawing is indicated within the text by a circled number. Locate the structure on the drawing and colour it, then use the same colour to fill in the circled number within the text. You may also find it helpful to highlight or underline the text.

In some instances, where the nature or location of the structure to be identified is such that the structure itself cannot readily be coloured, the number identifying it is contained within a circle or a square. In these cases, colour the circle or square.

There are some drawings that contain a large number of structures to be coloured. If you are limited by the number of colours you have available, try to vary the colours used on adjacent structures.

Test the colours before using them – dark colours will obscure labelling and detail, so use only lighter shades.

Labelling

Structures to be labelled are indicated within the text by a bold capital letter. Locate the structure on the drawing and write in the appropriate labelling. You may also find it helpful to label any of the coloured structures that are particularly important, or difficult to remember.

Always read through the text before beginning to work on a drawing – occasionally procedures other than colouring or labelling are involved.

PART I – Overview

DIRECTIONAL TERMS (Figure I)

Figures I(a) and (b) are concerned with directional terms which describe the location of various body structures. Figures I(c), (d) and (e) illustrate body planes (with the exception of the terms medial and lateral).

Fig. I(a) Lateral View I

Label:

- A Dorsal (indicates the location of a structure towards the back) *Дорсальный*
- B Ventral (indicates the location of a structure towards the belly) *Вентральный*
- C Cranial (describes the location of a body part towards the skull) *Краниальный*
- D Caudal (describes the location of a body part towards the tail) *Каудальный*
- E Rostral (specifically in the head, describes the location of a part towards the nose) *Ростральный*
- F Proximal (indicates a location towards the top of a limb) *Проксимальный*
- G Distal (indicates a location towards the foot of a limb) *Дистальный*

Fig. I(b) Lateral View 2

These terms are used when referring to the limbs.

Label:

- A Cranial (a structure located to the front of a forelimb above the knee) *Краниальный*
- B Dorsal (a structure located to the front of a forelimb below the knee) *Дорсальный*
- C Caudal (a structure located to the rear of a forelimb above the knee) *Каудальный*
- D Palmar (a structure located to the rear of a forelimb below the knee) *Пальмарный*
- E Cranial (a structure located to the front of a hind limb above the hock) *Краниальный*
- F Dorsal (a structure located to the front of a hind limb below the hock) *Дорсальный*
- G Caudal (a structure located to the rear of a hind limb above the hock) *Каудальный*
- H Plantar (a structure located to the rear of a hind limb below the hock) *Плантарный*

Fig. I(c) Lateral View 3

Label:

- A Dorsal, or frontal, planes (run through a body part parallel to its dorsal surface)
- B Transverse planes (pass through any body part perpendicular to the part's long axis)

Fig. I(d) From Above

Label:

- A Median plane (divides the head and trunk longitudinally into left and right halves)
- B Sagittal planes (are parallel to the median plane)

Fig. I(e) Cranial View

Label:

- A Median plane (definition as in Fig. I (d) A above)
- B Medial (refers to structures located towards the median plane – in the limbs, refers to the inner side)
- C Lateral (refers to structures located away from the median plane – in the limbs, refers to the outer side)

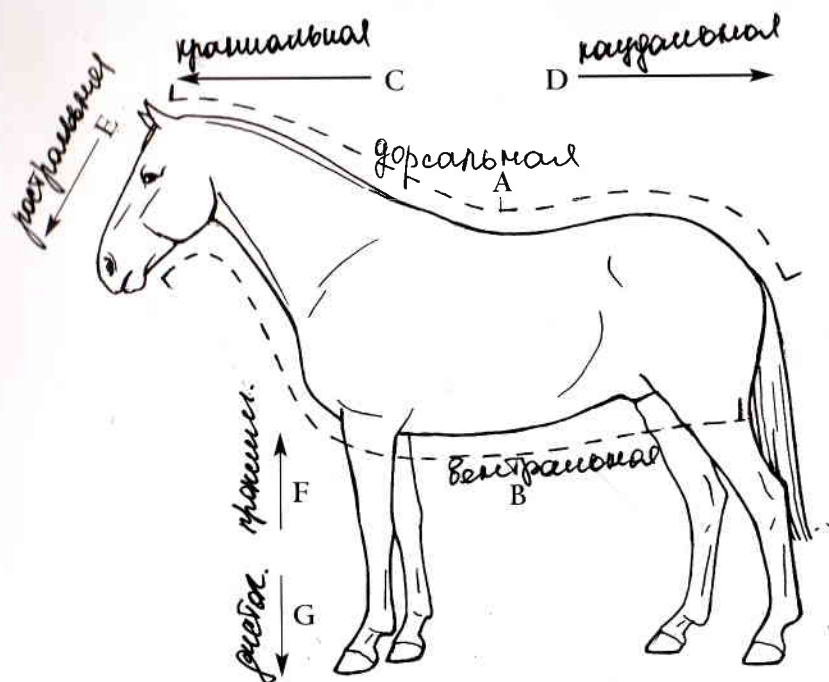


Fig. I(a) Lateral view 1

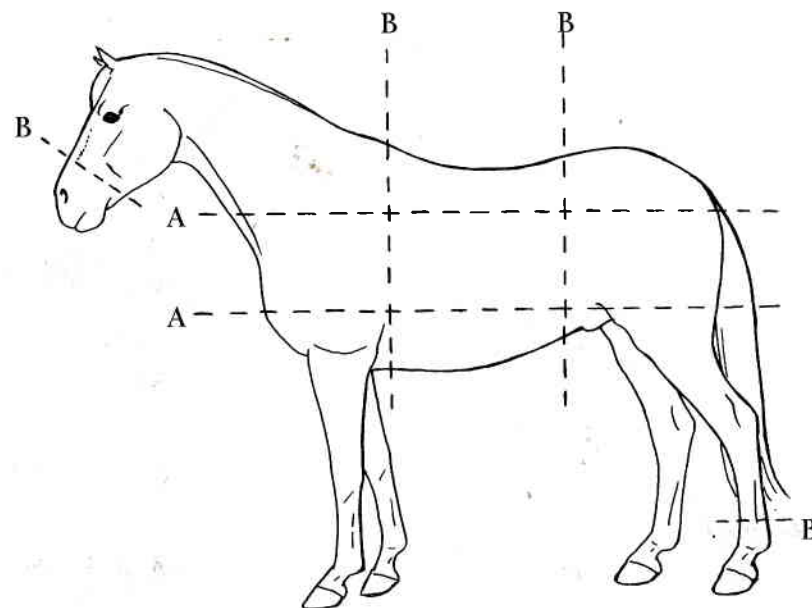


Fig. I(c) Lateral view 3

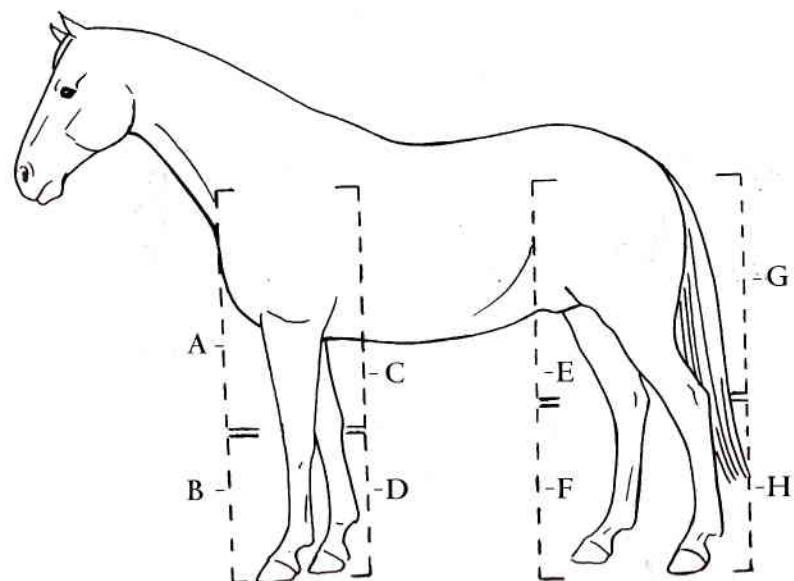


Fig. I(b) Lateral view 2

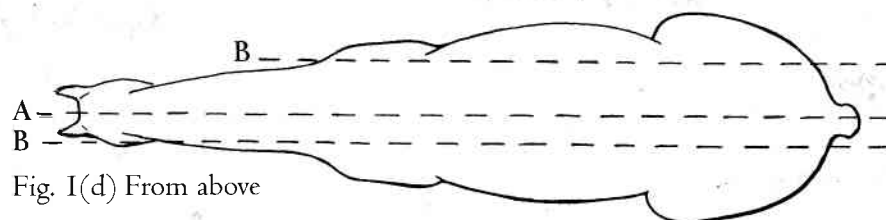


Fig. I(d) From above

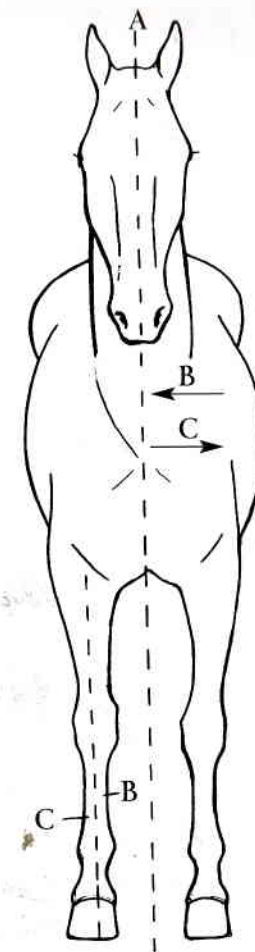


Fig. I(e) Cranial view

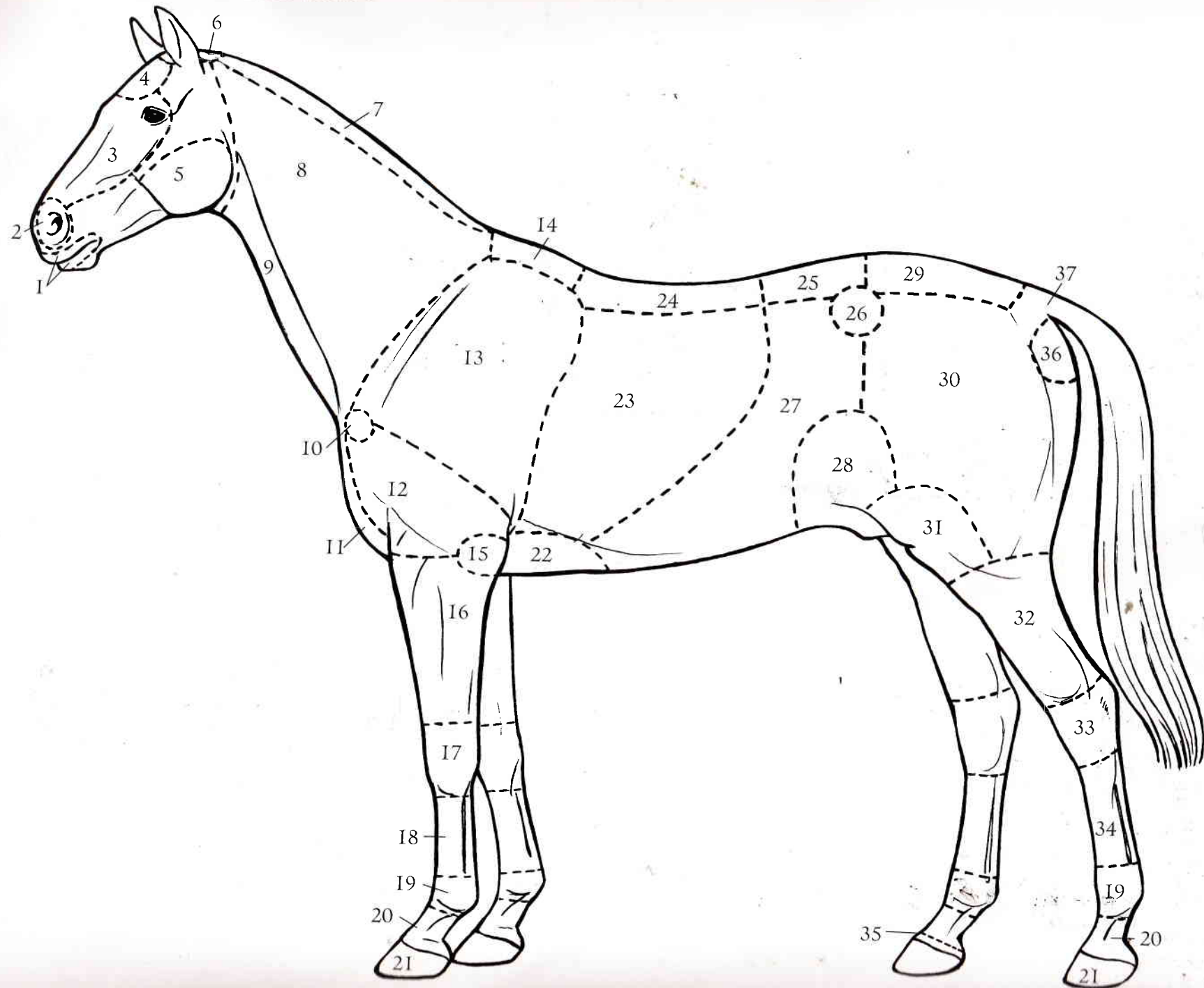
Области тела лошади.

Рисунок 2.

1. Lips – Губы.
2. Nostrils – Ноздри.
3. Face – Лицевая часть.
4. Forehead – Лоб.
5. Cheek – Ганаши.
6. Poll – Затылок.
7. Crest – Гребень шеи.
8. Neck – Шея.
9. Jugular groove – Яремная впадина.
10. Point of shoulder – Плечелопаточный сустав.
11. Chest – Подгрудок.
12. Arm – Плечо.
13. Shoulder – Лопатка.
14. Withers – Холка.
15. Elbow – Локоть.
16. Forearm – Предплечье.
17. Knee – Запястье.
18. Fore cannon – Пясть.
19. Fetlock – Путовый сустав.
20. Pastern – Путо, или бабка.
21. Hoof – Копыто.
22. Girth – Грудинная кость.
23. Thorax or barrel – Ребра.
24. Back – Спина, грудные позвонки.
25. Loin – Поясница, люмбальная область.
26. Point of hip – Подвздошный бугор, маклок.
27. Abdomen or belly – Брюшная область.
28. Flank – Пах.
29. Croup – Круп, крестцовая область.
30. Thing or quarter – Бедро.

31. Stifle – Колено, коленная чашечка.
32. Leg or gaskin – Голень.
33. Hock – Скакательный сустав, Заплюсневая область.
34. Hind cannon – Плюсна.
35. Coronet – Венчик.
36. Buttock – Седалищный бугор.
37. Dock – Репица, хвост.

FIGURE 2: REGIONS OF THE BODY



Point of the horse – surface features.

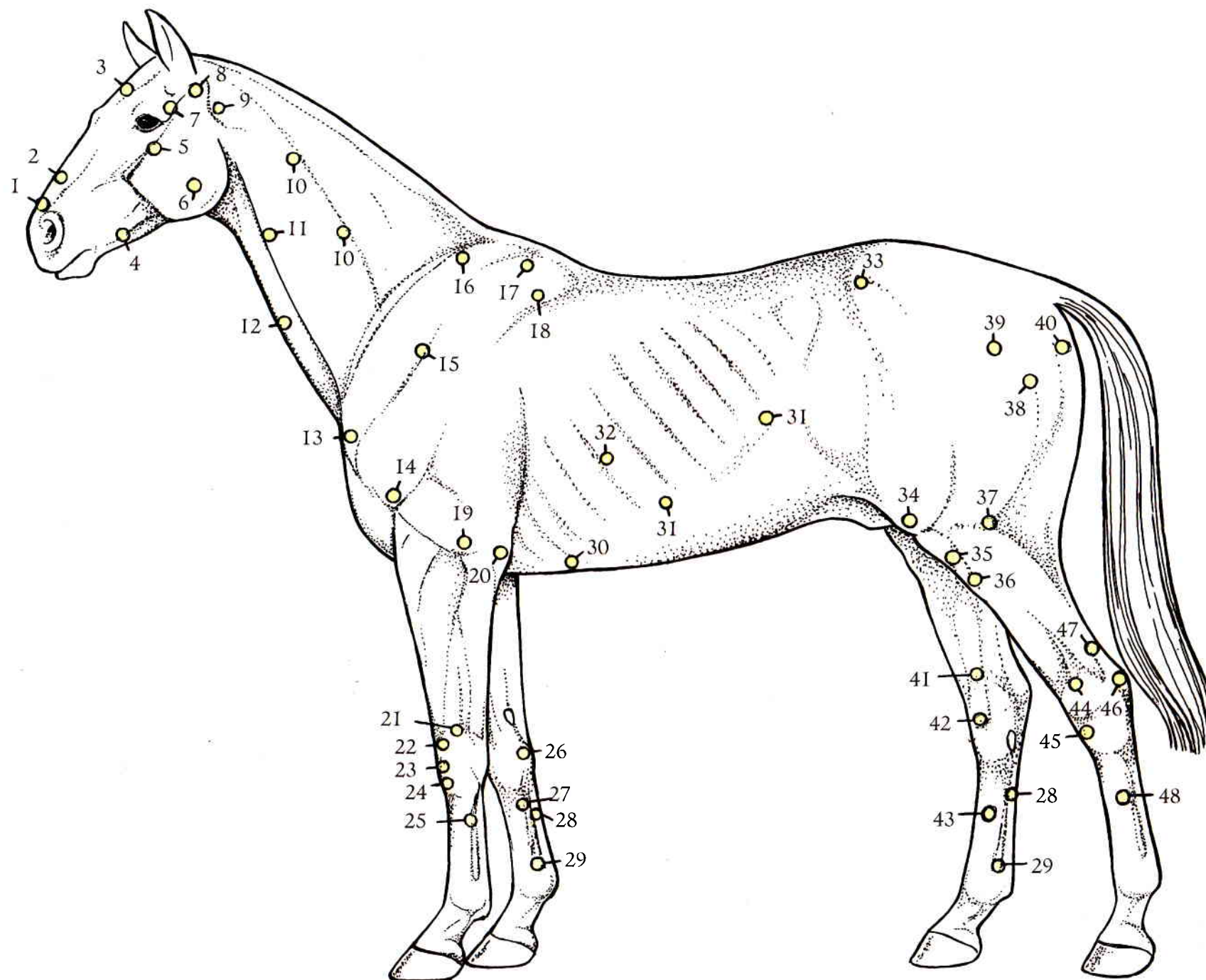
Figure 3.

Точки лошади – поверхностные черты.

Рисунок 3.

1. Nasal peak (rostral ends of nasal bones) – Кончик носа (ростральный конец носовых костей).
2. Nasal bone – Носовая кость.
3. Frontal bone – Лобная кость, лоб.
4. Body of mandible (lower jaw) – Тело нижней челюсти.
5. Facial crest – Лицевой гребень.
6. Masseter muscle – Жевательная мышца.
7. Zygomatic arch – Скуловая дуга.
8. Parotid salivary gland – Околоушная слюнная железа.
9. Wing of atlas – Крыло атланта.
10. Transverse processes of 3rd-6th cervical vertebrae – Поперечные отростки с 3го по 6й шейный позвонок.
11. Jugular groove – Яремный желоб.
12. Trachea (windpipe) – Трахея.
13. Point of shoulder (cranial part of greater tuberosity of humerus) – Точка плеча (краниальная ч. большого бугра плечевой).
14. Deoltoid tuberosity of humerus – Дельтовидная шероховатость плечевой кости.
15. Scapular spine – Ость лопатки.
16. Cranial angle of scapula – Краниальный угол лопатки.
17. Scapular cartilage – Лопаточный хрящ.
18. Caudal angle of scapula – Каудальный край лопатки.
19. Position of elbow joint – Расположение локтевого сустава.
20. Point of elbow (olecranon process of ulna) – Точка локтя (локтевой отросток локтевой кости).
21. Lateral styloid process of radius – Латеральный шиловидный отросток лучевой кости.
22. Proximal row of carpal bones – Проксимальный ряд костей запястья.
23. Distal row of carpal bones – Дистальный ряд костей запястья.
24. Metacarpal tuberosity – Пястная шероховатость.
25. Lateral splint bone – Латеральная грифельная кость.
26. Accessory bone – Добавочная кость запястья.
27. Medial splint bone – Медиальная грифельная кость.
28. Flexor tendon (superficial and deep digital flexor tendons) – Сгибательное сухожилие (поверхностный и глубокий пальцевый сгибатель).
29. Suspensory ligament – Подвешивающая связка.
30. Xiphoid process of sternum – Мечевидный отросток грудины.
31. Costal arch – Реберная дуга.
32. Ribs – Ребра.
33. Point of hip (tuber coxae) – Точка маклока (подвздошный бугор подвздошной кости).
34. Patella – Коленная чашечка.
35. Tibial tuberosity – Шероховатое утолщение.
36. Tibial crest (cranial margin of tibia) – Гребень большеберцовой кости.
37. Lateral epicondyle of femur – Латеральный надмыщелок бедренной кости.
38. Third trochanter of femur – Третий вертел бедренной к.
39. Position of hip joint (greater trochanter of femur) – Тазобедренный сустав (большой вертел бедренной к).
40. Point of buttock (tuber ischii) – Точка седалища (седалищный бугр).
41. Subcutaneous medial surface of tibia –
42. Medial malleolus of tibia – Медиальная лодыжка большеберцовой кости.
43. Medial splint bone – Медиальная грифельная кость.
44. Lateral malleolus of tibia – Латеральная лодыжка.
45. Lateral ridge of trochlea of talus (astralgus or tibial tarsal) – Латеральный гребень таранной кости.
46. Point of hock (tuber calcis) – Точка заплюсны (пяточный бугор).
47. Common calcaneal tendon (the aggregata of tendons attached to the hock, including Achilles' tendon) – Пяточные сухожилия (Ахиллово сухожилие, поверхностный пальцевый сгибатель и заплюсневое сухожилие).
48. Lateral splint bone – Латеральная грифельная кость.

FIGURE 3: POINTS OF THE HORSE – Surface Features



The skeleton – Lateral view.

Скелет – латеральная поверхность.

Рисунок 4.

A – Vertebrae – Позвоночный столб.

B – Tuber coxae – Подвздошный бугор.

C – Tuber sacrale – Крестцовый бугор.

D – Tuber ischii – Седалищный бугор.

1. Skull – Верхняя челюсть.
2. Mandible – Нижняя челюсть.
3. Scapula – Лопатка.
4. Scapular cartilage – Лопаточный хрящ.
5. Humerus – Плечевая кость.
6. Sternum – Грудная кость.
7. Radius – Лучевая кость.
8. Ulna – Локтевая кость.
9. Carpal bones – Кости запястья.
10. Lateral splint bone (metacarpal or M4) – Кости пясти, 4
паястная кость.
11. Medial splint bone (metacarpal or M2) – 2 паястная кость.
12. Cannon bone (metacarpal or M3) – 3 паястная кость.
13. Pastern bone – Путовая кость.
14. Proximal sesamoid bones – Сесамовидная кость.
15. Short pastern bone – Венечная кость.
16. Pedal bone – Копытовидная кость.
17. Navicular bone – Челночная кость.
18. Costal cartilages – Реберные хрящи.
19. Ribs – Ребра.
20. Ilium – Подвздошная кость.
21. Pubis – Лонная кость.
22. Ischium – Седалищные бугры.
23. Femur – Бедренная кость.

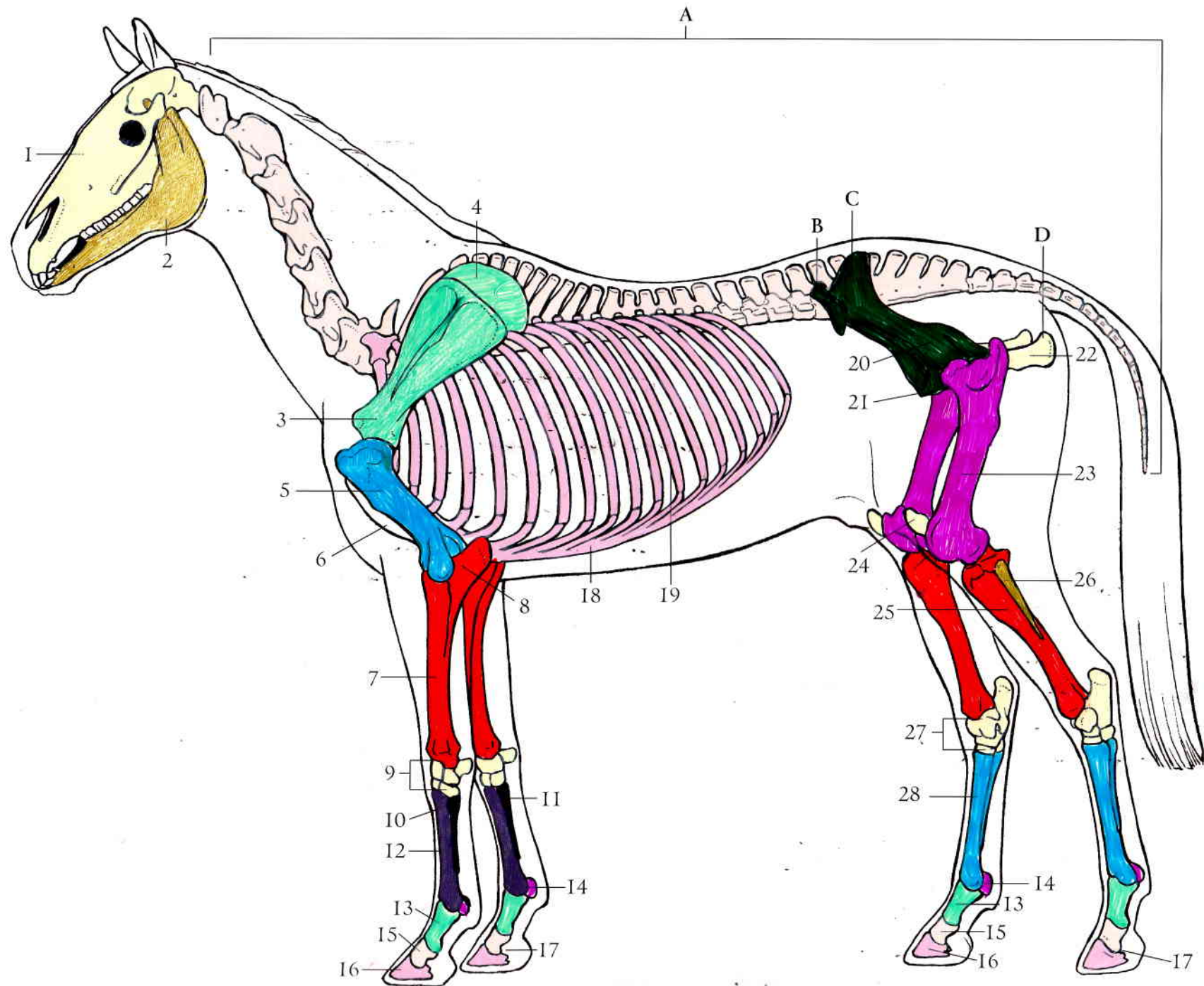
24. Patella – Коленная чашечка.

25. Tibia – Большеберцовая кость.

26. Fibula – Малоберцовая кость.

27. Tarsal bones – Кости заплюсны.

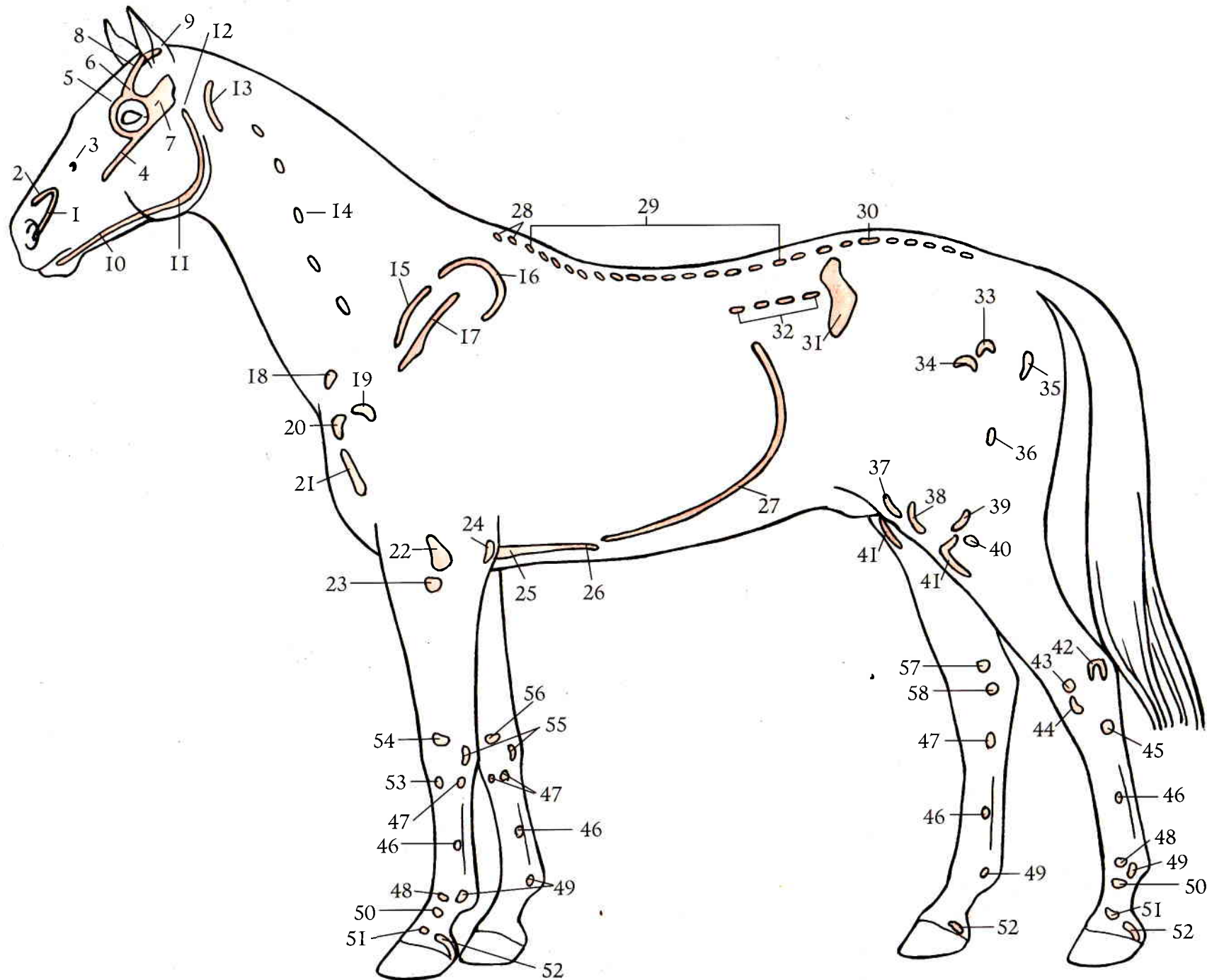
28. Hind cannon – Плюсовая кость.

[illegible]

Major palpable skeletal features – figure 5.
Пальпируемые детали скелета – рисунок 5.

1. Nasal process of incisive bone – Носовой отросток резцовой кости.
2. Nasal peak – Верхушка носа.
3. Infraorbital foramen – Подглазничное отверстие.
4. Facial crest – Лицевой гребень.
5. Orbit – Костный край орбиты.
6. Zygomatic process of frontal bone – Скуловой отросток лобной к.
7. Zygomatic arch – Скуловая дуга.
8. Temporal line of frontal bone – Височная линия лобной кости.
9. External occipital protuberance – Наружный теменной гребень.
10. Ventral border of mandibular body – Вентральный край нижней челюсти.
11. Angle of mandible – Угол нижней челюсти.
12. Mandibular condyle – Нижнечелюстной мыщелок.
13. Wing of atlas – Крыло атланта.
14. Transverse processes of cervical vertebrae – Поперечные отростки типичных шейных позвонков.
15. Proximal part of cranial border of scapula – Проксимальная часть краниального угла лопатки.
16. Dorsal of border of scapular cartilage – Дорсальный край лопаточного хряща.
17. Scapular spine – Ость лопатки.
18. Manubrium of sternum – Рукоятка грудины.
19. Caudal part of greater tubercle of humerus – Каудальная часть большого бугра плечевой кости.
20. Cranial part of greater tubercle of humerus – Краниальная часть большого бугра плечевой кости.
21. Deltoid tuberosity of humerus – Дельтовидная шероховатость плечевой кости.
22. Lateral epicondyle of humerus – Латеральный надмыщелок плечевой кости.
23. Lateral tuberosity of radius – Латеральная шероховатость лучевой к
24. Olecranon process of ulna – Локтевой отросток локтевой кости.
25. Body of sternum – Тело грудины.
26. Xiphoid cartilage of sternum – Мечевидный хрящ грудины.
27. Costal arch – Реберная дуга.
28. Withers – Холка (основана 3-5 остистыми отростками грудных позвонков).
29. Spinous processes of thoracic vertebra 6 to caudal vertebra 2 – От 6 грудного позвонка до 2 хвостового соединены надостистой связкой.
30. Sacral tuber of ilium – Крестцовый бугор подвздошной кости.
31. Coxal tuber of ilium – Маклок подвздошной кости.
32. Transverse processes of lumbar vertebrae – Поперечные отростки поясничных позвонков.
33. Caudal part of greater trochanter of femur – Каудальная часть большого вертела бедренной кости.
34. Cranial part of greater trochanter of femur – Краниальная часть большого вертела бедренной кости.
35. Ischiatic tuber of ischium – Седалищный бугор седалищной кости.
36. 3rd trochanter of femur – 3 вертел бедренной кости.
37. Patella – Коленная чашечка.
38. Lateral ridge of femoral trochlea – Латеральный гребень блока бедренной кости.
39. Lateral epicondyle of femur – Латеральный надмыщелок бедренной к.
40. Lateral condyle of tibia and head of fibula – Латеральный мыщелок большеберцовой к и головка малоберцовой кости.
41. Crest of tibia – Шероховатость большеберцовой кости.
42. Calcaneal tuber – Пяточный бугор.
43. Lateral malleolus of tibia – Латеральная лодыжка большеберцовой к.
44. Trochlea of talus – Блок таранной кости.
45. Lateral surface of base of 4th metacarpal or metatarsal bone – Латеральная повер. 4 пястной и плюсневой костей.
46. Distal ends of 2nd or 4th metacarpal or metatarsal bone – Дистальный концы(пуговицы) 2 и 4 пястной или плюсневой кости.
47. Medial surface of base of 2nd metacarpal or metatarsal bone – Медиальная повер. 2 пястной или плюсневой костей.
48. Distal tuberosities of 3rd metacarpal or metatarsal bone – Дистальная шероховатость 3 пястной или плюсневой костей.
49. Proximal sesamoid bones – Проксимальные сезамовидные к.
50. Proximal tuberosities of 1st phalang – Проксимальная шероховатость первой фаланги.
51. Distal tuberosities of 1st phalang – Дистальная шероховатость первой фаланги.
52. Proximal border of lateral cartilage of 3rd phalanx – Проксимальный край хряща 3 фаланги.
53. Metacarpal tuberosity of 3rd metacarpal – Пястная шероховатость 3 пястной кости.
54. Lateral styloid process of radius – Латеральный шиловидный отросток лучевой кости.
55. Accessory carpal bone – Добавочная кость запястья.
56. Medial styloid process of radius – Медиальный шиловидный отросток лучевой кости.
57. Medial malleolus of tibia – Медиальная лодыжка большеберцовой кости.
58. Medial tuberosity of talus – Медиальная шероховатость таранной кости.

FIGURE 5: MAJOR PALPABLE SKELETAL FEATURES – Lateral View



Skeleton and surface features from above – figure 6.
Скелет и его поверхностные детали – рисунок 6.

Рис 6(a) Скелет.

- A – Atlas (1st cervical vertebra) – Атлант (первый шейный позвонок).
B – Axis (2nd cervical vertebra) – Эпистрофей (второй шейный позвонок).
C – Cervical vertebrae 3-7 – Шейные позвонки с 3 по 7.
D – Thoracic vertebrae 1-8 – Грудные позвонки 1 – 8.
E – Lumbar vertebrae – Поясничные позвонки.
F – Sacrum (5 fused vertebrae) – Крестец (5 сросшихся позвонков).
G – 1st caudal vertebrae – Хвостовые позвонки.

1. Scapula – Лопатка.
2. Humerus – Плечевая кость.
3. Scapular cartilage – Лопаточный хрящ.
4. Ribs – Ребра.
5. Pelvic bone – Тазовая кость.
6. Femur – Бедренная кость.

Рис 6(b) Поверхностные детали.

1. External parietal crest – Наружный теменной гребень.
2. Wing of atlas – Крыло атланта.
3. Transverse process of cervical vertebrae – Поперечные отростки шейных позвонков.
4. Lesser tubercle of humerus – Малый бугор плечевой кости.
5. Cranial part of greater tubercle of humerus – Краниальная часть большого бугра плечевой кости.
6. Scapular spine – Ость лопатки.
7. Scapular cartilage – Лопаточный хрящ.
8. Spinous processes of thoracic vertebrae – Остистые отростки грудных позвонков.
9. Spinous processes of lumbar vertebrae – Остистые отростки поясничных позвонков.
10. Sacral tuber of ilium – Крестцовый бугор подвздошной кости.
11. Sacral Spinous processes – Крестцовые остистые отростки.
12. Transverse processes of lumbar vertebrae – Поперечные отростки поясничных позвонков.

13. 18th rib – 18ое ребро.

14. Coxal tuber of ilium – Тазовый бугор подвздошной кости.

15. Greater trochanter of femur – Большой вертел бедренной кости.

16. Ischiatic tuber of ischium – Седалищный бугор седалищной кости.

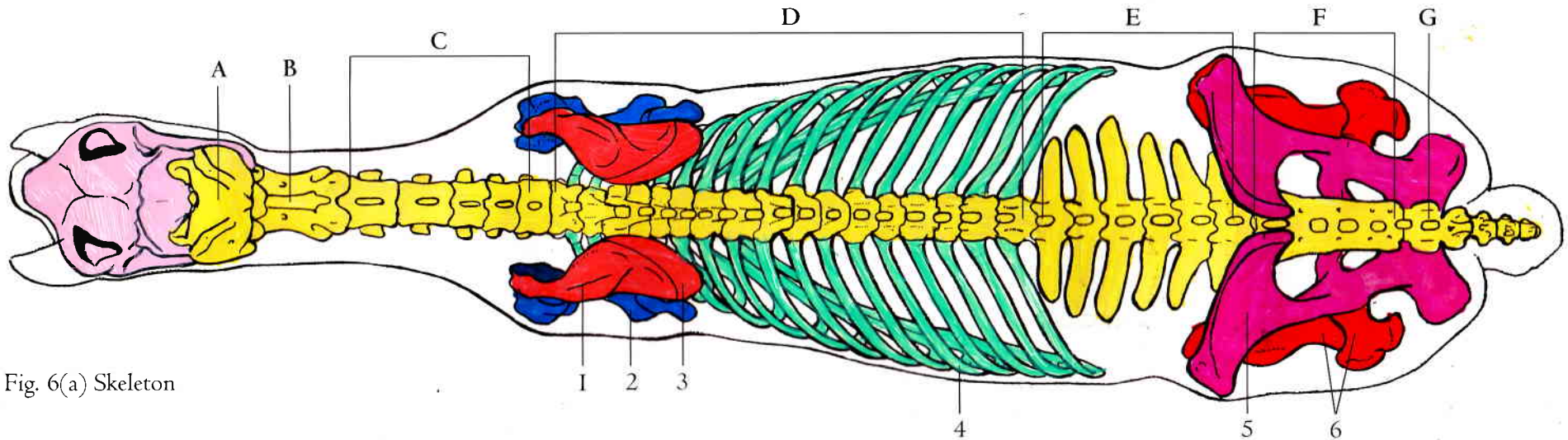


Fig. 6(a) Skeleton

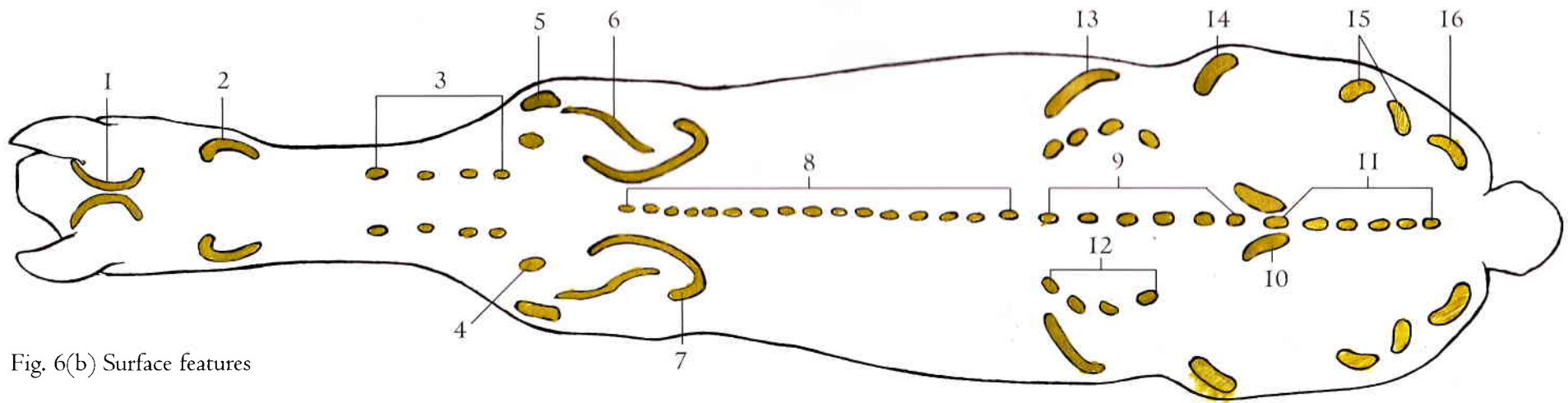


Fig. 6(b) Surface features

Vertebral column, ribs and sternum – Lateral overview and various views.

Позвоночный столб, ребра и грудная кость – латеральная и поверхности.

Рисунок 7.

Рис.7 латеральная поверхность.

A – 7 Cervical vertebrae – 7 Шейных позвонков.

B – 18 Thoracic vertebrae – 18 Грудных позвонков.

C – 6 Lumbar vertebrae – 6 Поясничных позвонков.

D – 5 Sacral vertebrae – 5 Крестцовых позвонков.

E – 15-21 Caudal vertebrae – 15-21 Хвостовых позвонков.

F – Sternum – Грудная кость.

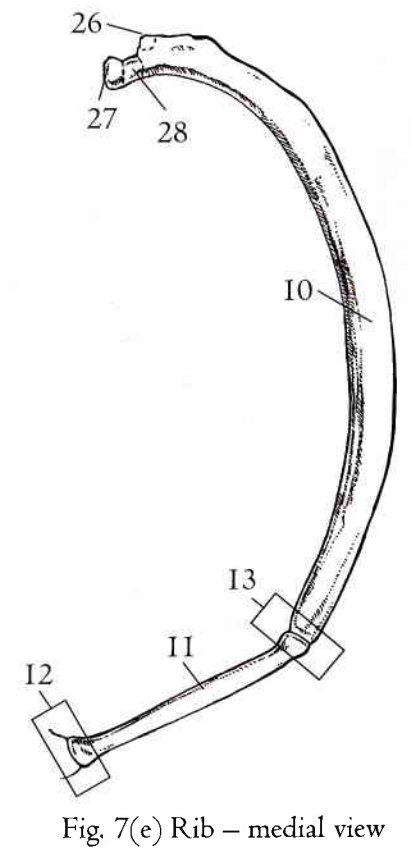
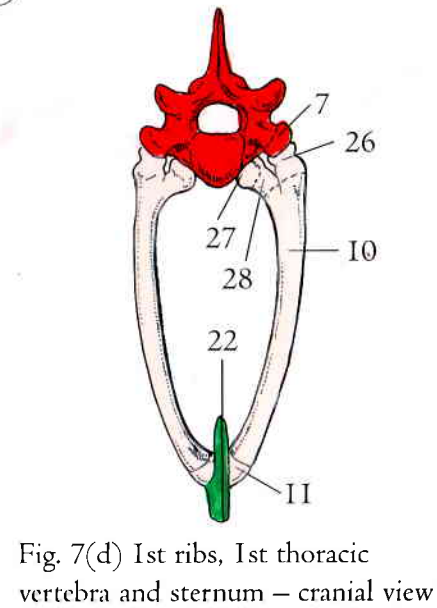
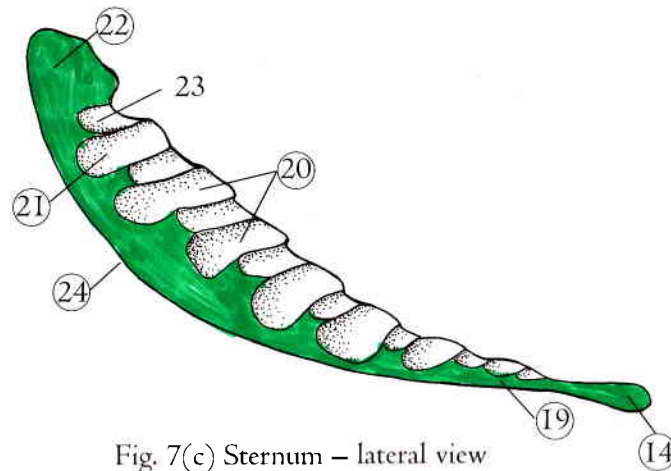
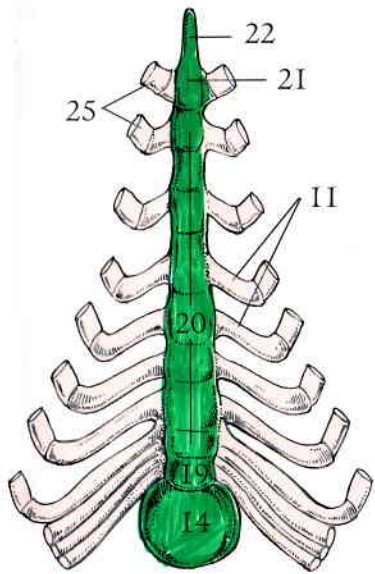
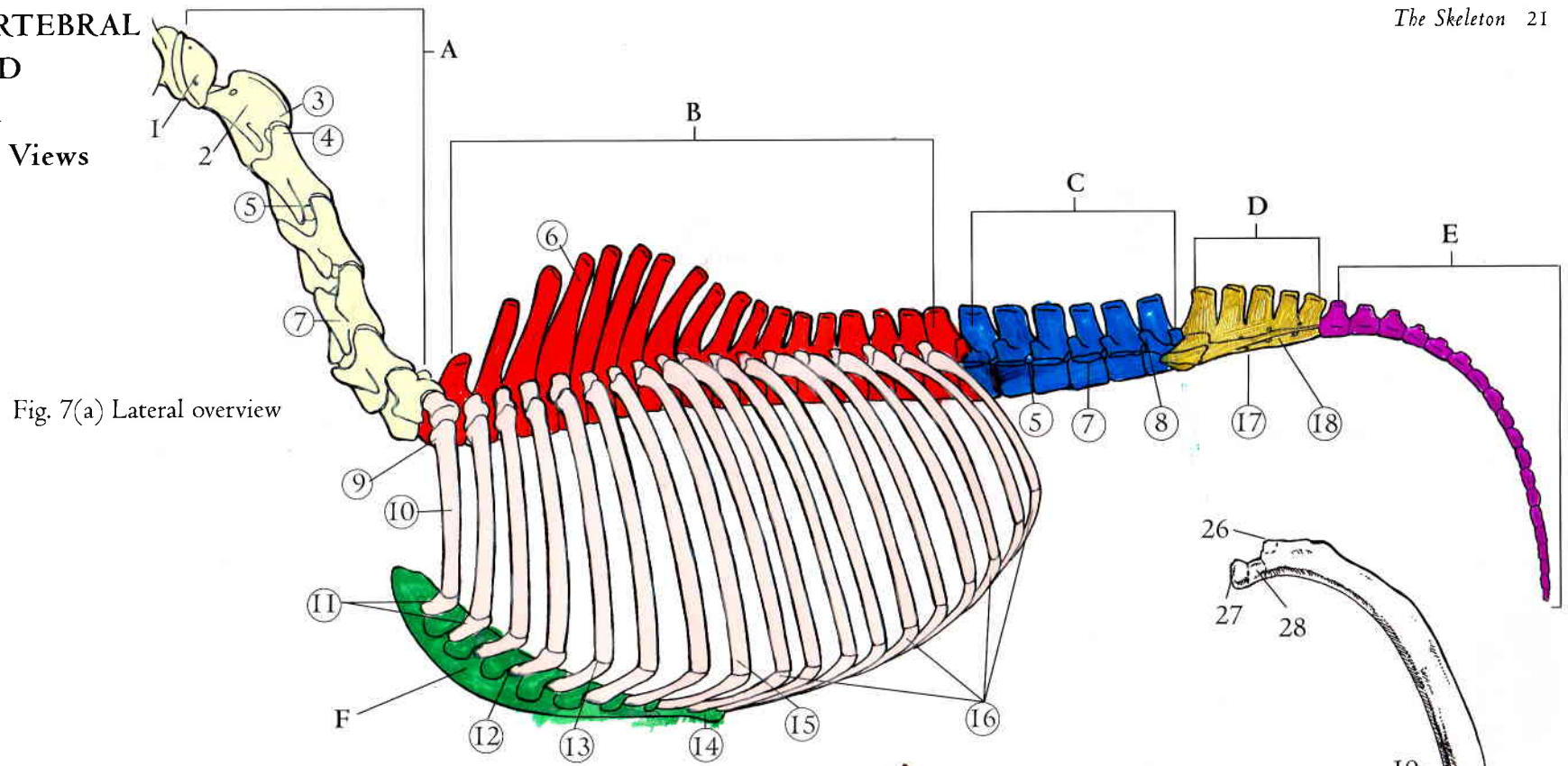
1. Atlas – Атлант.
2. Axis – Эпистрофей.
3. Caudal articular process – Каудальный суставной отросток.
4. Cranial articular process – Краниальный суставной отросток.
5. Intervertebral foramen – Межпозвоночная вырезка.
6. Spinous process – Остистые отростки.
7. Transverse process – Поперечно-реберные отростки.
8. Mammillary process – Сосцевидный отросток.
9. Neck of rib – Головка ребра.
10. Shaft of rib – Тело ребра.
11. Costal cartilage – Реберный хрящ.
12. Sternocostal junction – Грудино-реберный сустав.
13. Costochondral junction – Реберно-хрящевое сращение.
14. Xiphoid cartilage – Мечевидный хрящ.
15. 8th rib – 8 ребро.
16. Costal arch – Реберные хрящи.
17. Ventral sacral foramina – Вентральные крестцовые отверстия.
18. Lateral sacral crest –

7(b) and (c) Sternum – dorsal and lateral view, (d) 1st ribs, 1st thoracic vertebra and sternum – cranial view and (e) ribs, medial view/

7(a) и (c) грудная кость – дорсальная и латеральная поверхности, (д) и ребра, грудные позвонки и грудная кость – краниальная поверхность и ребро медиальная поверхность.

7. Transverse process – Поперечно-реберные отростки.
10. Shaft of rib – Тело ребра.
11. Costal cartilage – Реберный хрящ.
12. Sternocostal junction – Грудино-реберный сустав.
13. Costochondral junction – Реберно-хрящевое сращение.
14. Xiphoid cartilage – Мечевидный хрящ.
19. Xiphoid process – Мечевидный отросток.
20. Sternebrae – Стернебр.
21. Manubrium – Рукоятка.
22. Manubrium cartilage – Хрящ рукоятки.
23. Costal facets for 1st rib – Реберные ямки.
24. Ventral cartilaginous crest (keel) of sternum – Хрящевая пластинка – сокол.
25. Ribs – Ребра.
26. Tubercle – Бугорок ребра.
27. Head of rib – Головка ребра.
28. Neck of rib – Шейка ребра.

FIGURE 7: THE VERTEBRAL COLUMN, RIBS AND STERNUM – Lateral Overview and Various Views



Vertebrae and complete spinal column – figure 8.
Позвонки и позвоночный столб – рисунок 8.

1. Body of vertebra – Тело позвонка.
2. Arch of vertebra – Дужка позвонка.
3. Vertebral foramen – Позвоночное отверстие (формирует позвоночный канал для спинного мозга).
4. Spinous process – Остистый отросток.
5. Transverse process – Поперечный отросток.
6. Mammillary process – Сосцевидный отросток (есть только у грудных и поясничных позвонков).
7. Cranial articular process – Краниальный суставной отросток.
8. Caudal articular process – Кaudальный суставной отросток.
9. Transverse canal of cervical vertebra – Поперечный канал шейного позвонка.
10. Costal articular surface on transverse process – Реберная суставная поверхность на поперечном отростке (для сочленения с головкой ребра).
11. Costal articular surface on vertebral body – Реберная суставная поверхность на теле позвонка (для сочленения с головкой ребра).
12. Transverse foramen of cervical vertebra – Поперечное отверстие шейного позвонка.
13. Synovial joint surface for articulation with sacral wing – Суставная поверхность на поперечном отростке поясничного позвонка для сочленения с крылом крестца.

**FIGURE 8: VERTEBRAE AND COMPLETE SPINAL COLUMN –
Lateral Overview and Various Views**

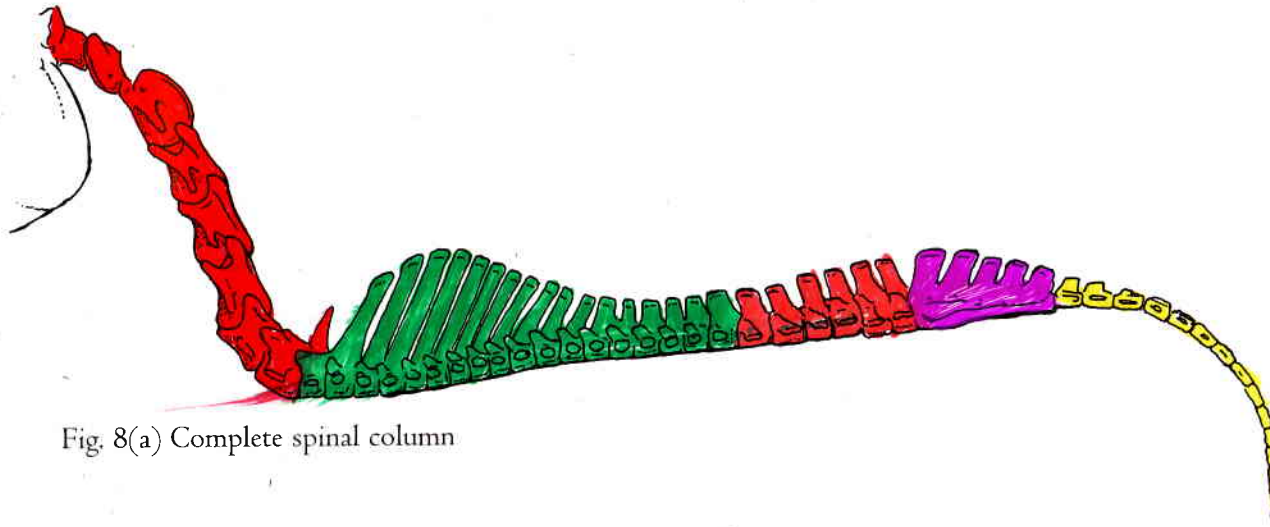


Fig. 8(a) Complete spinal column

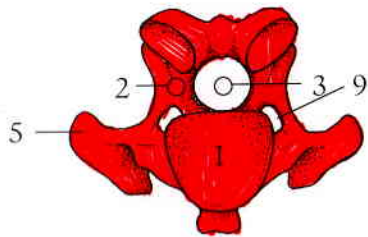


Fig. 8(b) Cervical 5 – caudal view

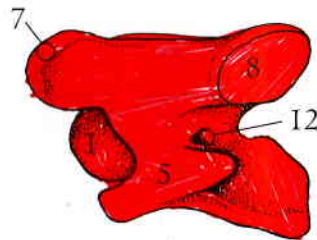


Fig. 8(c) Cervical 6 – lateral view

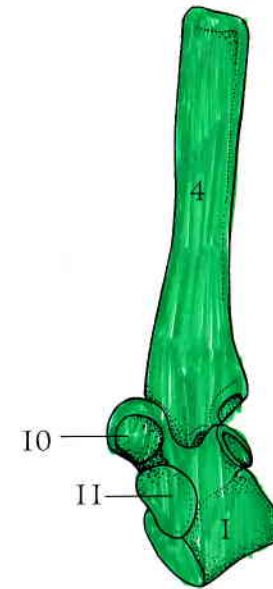


Fig. 8(d) Thoracic 6 – lateral view

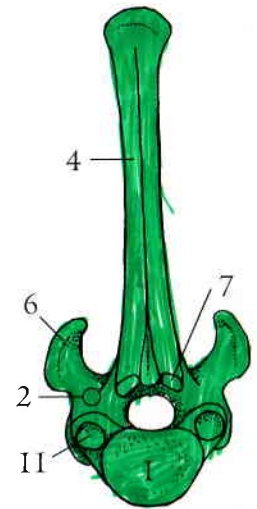


Fig. 8(e) Thoracic 6 – cranial view

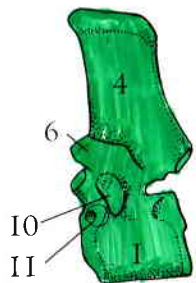


Fig. 8(f) Thoracic I6 – lateral view

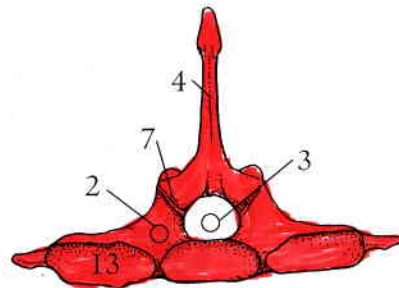


Fig. 8(g) Lumbar 6 – caudal view

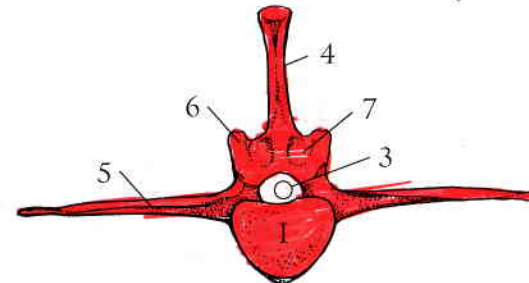


Fig. 8(h) Lumbar 3 – cranial view

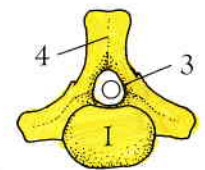


Fig. 8(i) Caudal I – cranial view

Atlas, axis and sacrum – figure 9.

Атлант, эпистрофей и крестец – рисунок 9.

A – Atlas – Атлант.

B – Axis – Эпистрофей.

C – Wing of atlas – Крыло атланта.

D – Dorsal arch – Дорсальный бугорок.

Атлант и эпистрофей.

1. Spinous process of axis – Остистый отросток эпистрофея.
2. Transverse process of axis – Поперечный отросток эпистрофея.
3. Cranial articular cavities of atlas – Краниальная суставная поверхность атланта.
4. Cranial articular process of axis – Краниальные суставные отростки эпистрофея.
5. Caudal articular process of axis – Каудальные суставные отростки эпистрофея.
6. Odontoid process of axis – Зубовидный отросток эпистрофея.
7. Intervertebral foramina – Межпозвоночное отверстие.
8. Transverse foramina – Поперечное отверстие.
9. Ventral spine of axis –

A – Vertebral foramen –

Крестец.

1. Spinous processes – Остистые отростки.
2. Dorsal sacral foramina – Дорсальные крестцовые отверстия.
3. Ventral sacral foramina – Вентральные крестцовые отверстия.
4. Lateral sacral crest – Латеральный гребень крестца.
5. Auricular surface of wing of sacrum – Ушковидная поверхность крыла крестца.
6. Synovial joint surface of sacrum – Суставная поверхность крестца.
7. Sacral wing – Крыло крестца.
8. Mamillary process – Суставной отросток.

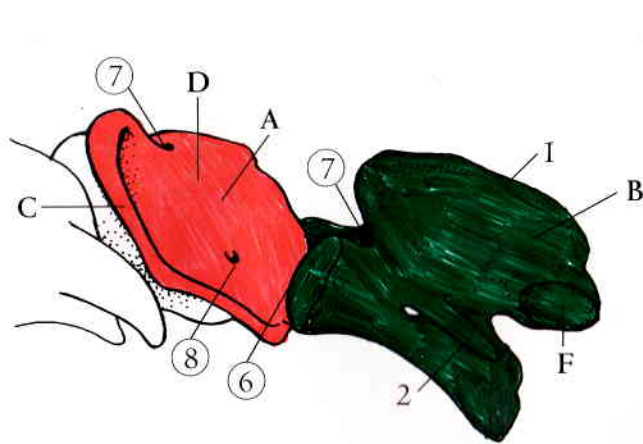


Fig. 9(a) Atlas and axis – lateral view

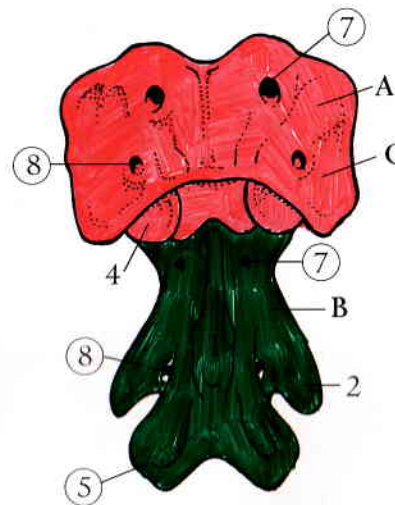


Fig. 9(b) Atlas and axis – dorsal view

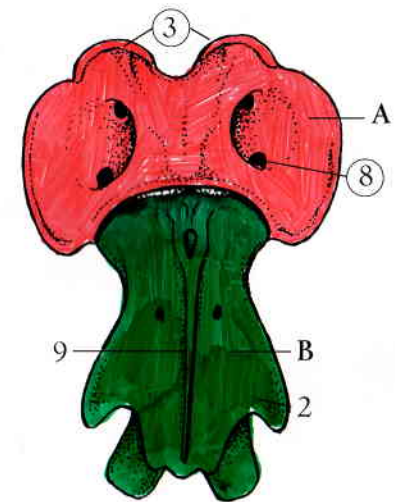


Fig. 9(c) Atlas and axis – ventral view

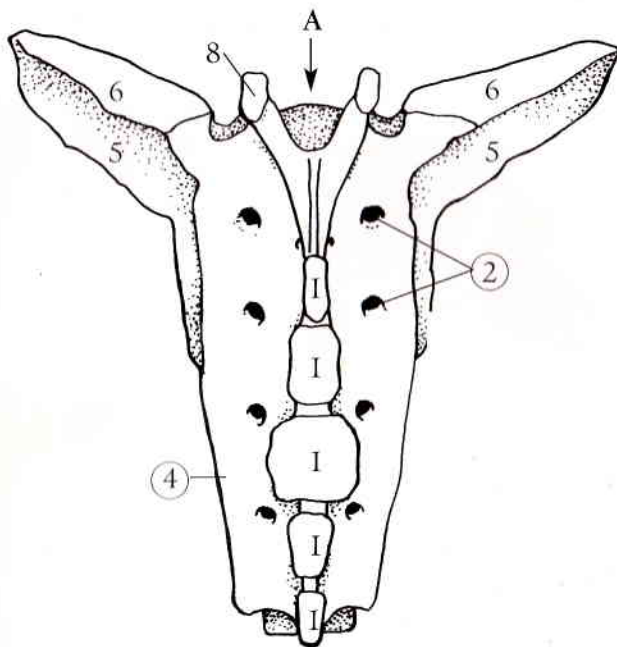


Fig. 9(d) Sacrum – dorsal view

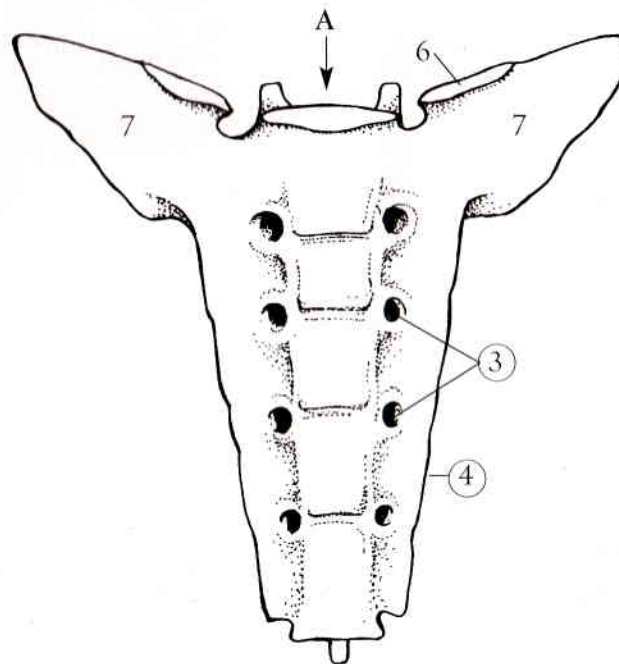


Fig. 9(e) Sacrum – ventral view

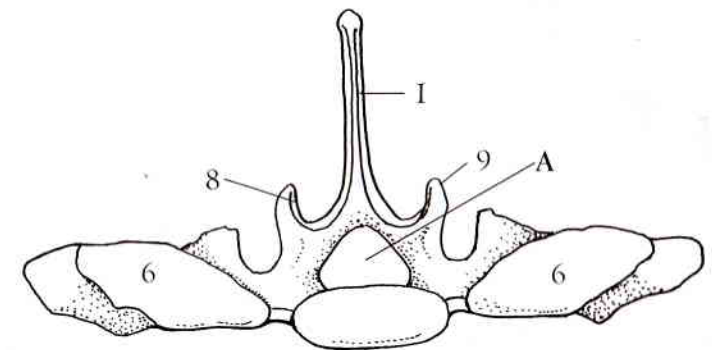


Fig. 9(f) Sacrum – cranial view

The pelvic gridle – dorsal and lateral view (figure 10)

Тазовая кость – дорсальная и латеральная поверхности.

Рисунок 10.

A – Ilium – Подвздошная кость.

B – Pubis – Лонная кость.

C – Ischium – Седалищная кость.

D – Sacrum – Крестец.

E – Caudal vertebrae – Хвостовые позвонки.

F – Obturator foramen – Заперательное отверстие.

1. Tuber sacrale – Крестцовый бугор.
2. Crest of ilium – Подвздошный гребень.
3. Tuber coxae – Маклок.
4. Isthmic spine – Седалищная ость.
5. Acetabulum – Суставная впадина.
6. Symphysis pelvis – Тазовый шов.
7. Tuber ischii – Седалищные бугры.

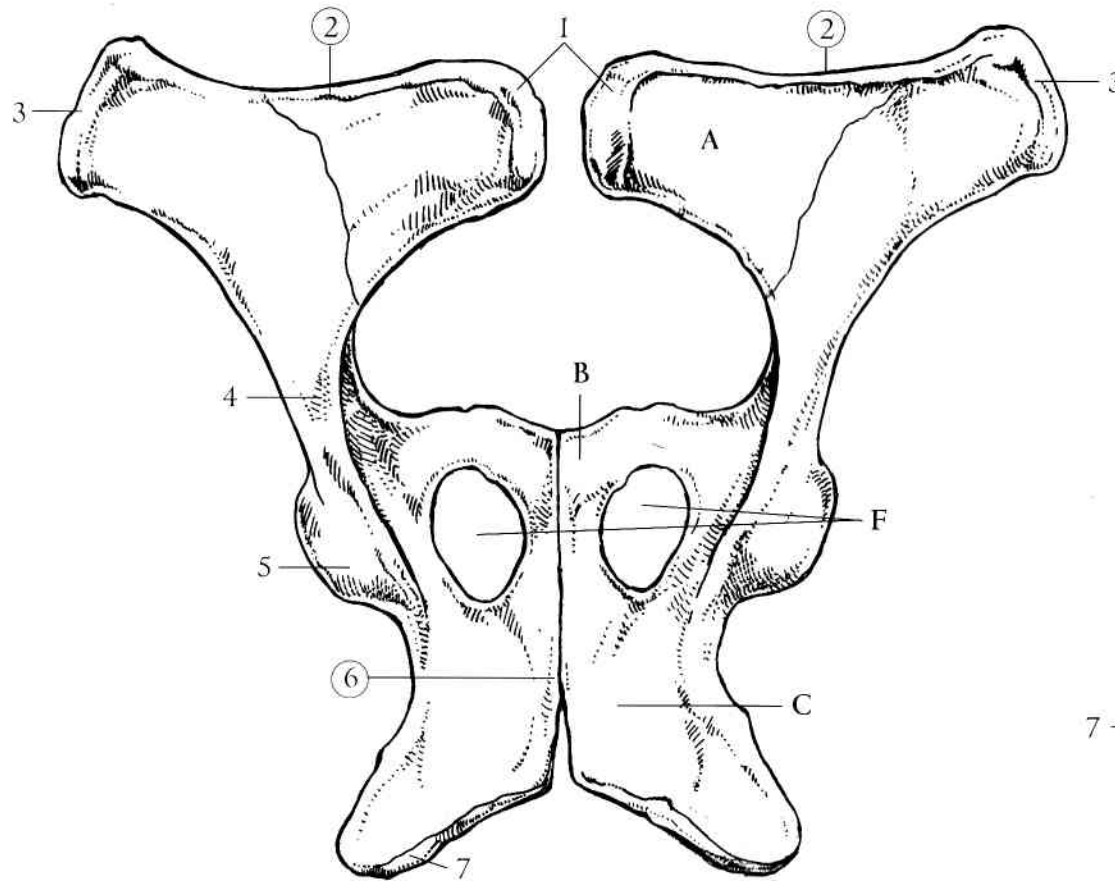


Fig. 10(a) Dorsal view

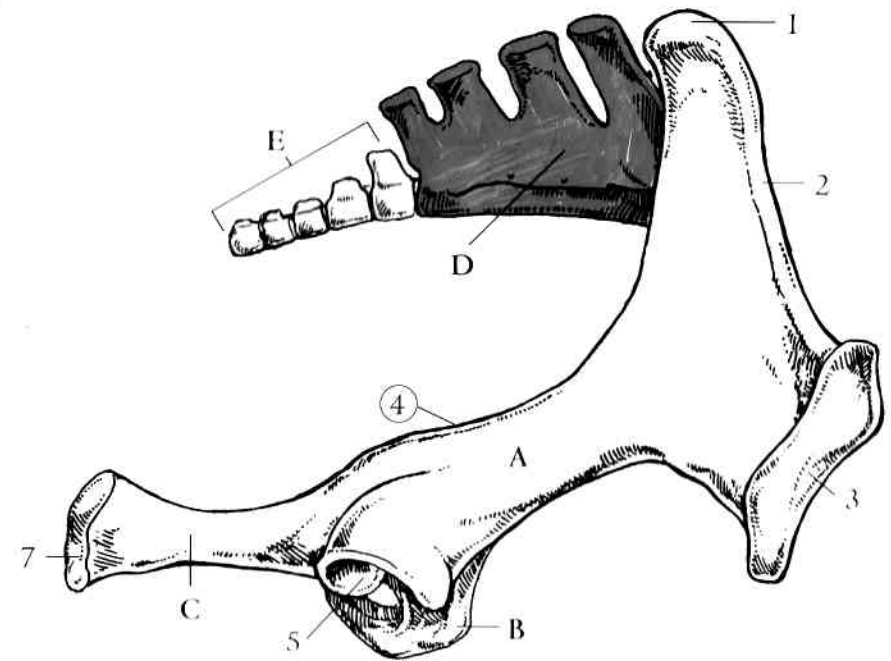


Fig. 10(b) Lateral view

The thing and leg – cranial and caudal views.

Figure 11.

Бедро и голень – краниальная и каудальная поверхности.

Рисунок 11.

A – Femur – Бедренная кость.

B – Fibula – Малоберцовая кость.

C – Tibia – Большеберцовая кость.

D – Intertrochanteric crest – Межвертлужный гребень.

E – Neck – Шейка.

F – Fovea – Головка.

1. Head – Головка.
2. Major trochanter – Большой вертел.
3. Minor trochanter – Малый вертел.
4. 3rd trochanter – Третий вертел.
5. Patella – Коленная чашечка.
6. Lateral epicondyle – Латеральный надмыщелок.
7. Medial epicondyle – Медиальный надмыщелок.
8. Trochlea – Блок бедренной кости.
9. Lateral condyle – Латеральный мыщелок.
10. Medial condyle – Медиальный мыщелок.
11. Articular surface for lateral condyle – Латеральная суставная поверхность латерального мыщелка.
12. Tibial tuberosity – Шероховатость большеберцовой кости.
13. Intercondylar eminence – Межмыщелковое возвышение.
14. Articular surface for medial condyle – Медиальная суставная поверхность медиального мыщелка.
15. Lateral malleolus – Латеральная лодыжка.
16. Articular surface (tibial cochlea) – Винтообразный блок большеберцовой кости.
17. Medial malleolus – Медиальная лодыжка.

FIGURE 11: THE THIGH AND LEG – Cranial and Caudal Views

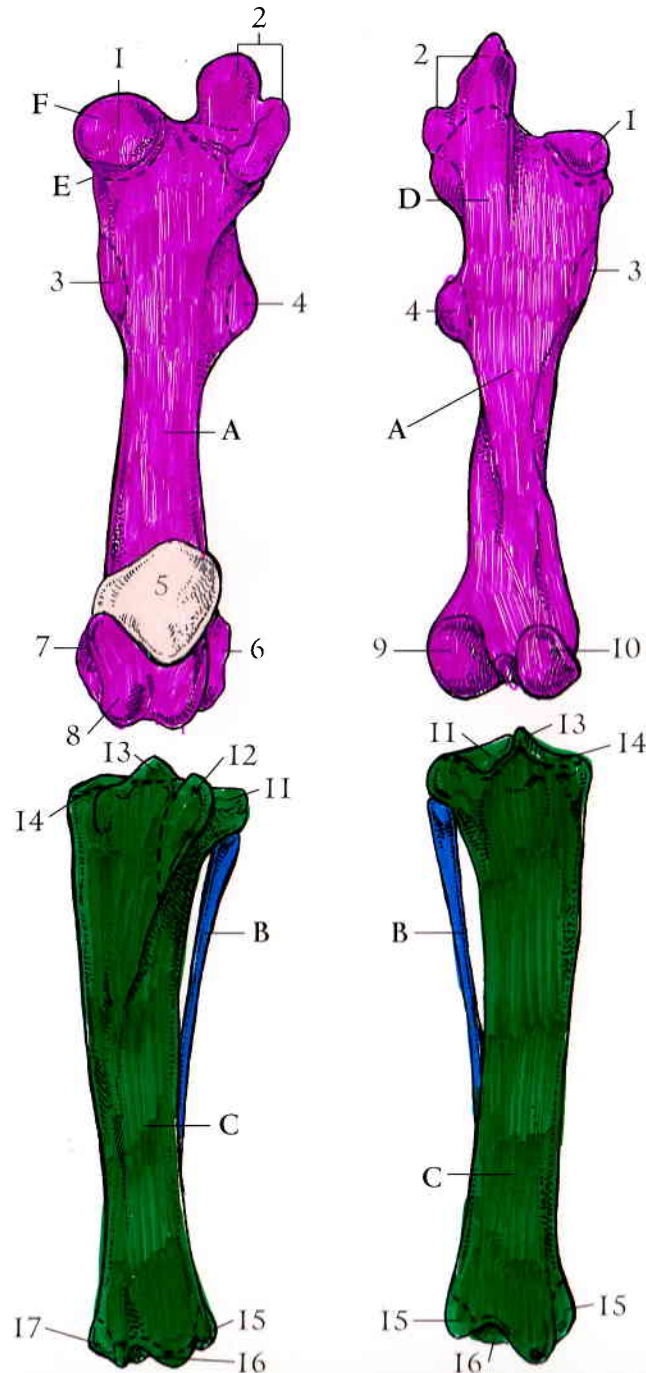


Fig. 11(a) Cranial view

Fig. 11(b) Caudal view

The hock – dorsal, plantar and medial views.

Figure 12.

Заплюсневый, или скакательный сустав – дорсальная, плантарная и медиальная поверхности.

Рисунок 12.

A – Trochlea – Блок таранной кости.

B – Talus – Таранная кость.

C – Calcaneus – Пяточный отросток.

D – Calcaneal tuber – Пяточный бугор.

E – Sustentaculum tali – Держатель таранной кости.

1. Central tarsal bone – Центральная заплюсневая кость (ладьевидная).
2. 1st and 2nd tarsal bones (fused) – 1+2 заплюсневые кости (медиальная клиновидная и проксимальная клиновидная).
3. 3rd tarsal bone – 3ая заплюсневая кость (латеральная клиновидная).
4. 4th tarsal bone – 4ая заплюсневая кость (кубовидная).
5. 2nd metatarsal bone – 2ая плюсневая кость.
6. 3rd metatarsal bone – 3ая плюсневая кость.
7. 4th metatarsal bone – 4ая плюсневая кость.

FIGURE 12: THE HOCK – Dorsal, Plantar and Medial Views

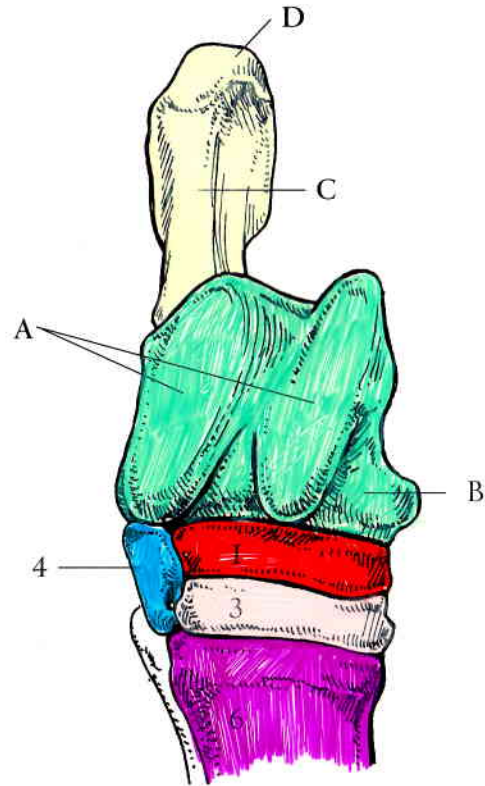


Fig. 12(a) Dorsal view

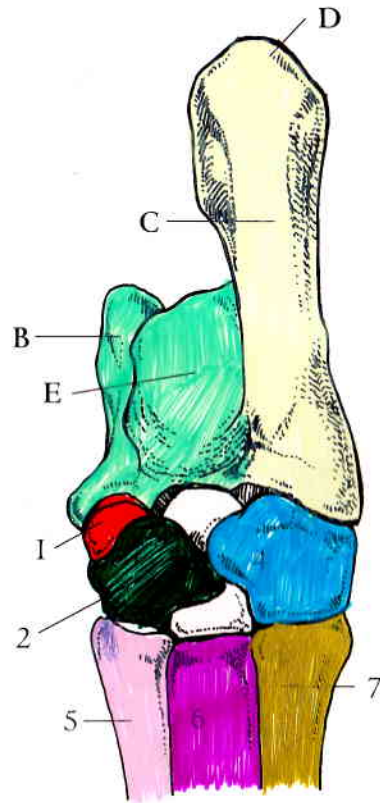


Fig. 12(b) Plantar view

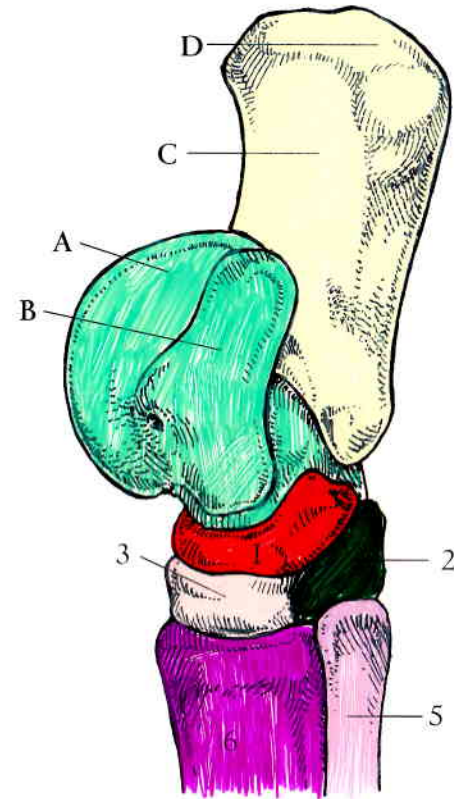


Fig. 12(c) Medial view

Shoulder, arm and forearm – lateral and medial views.

Figure 13.

Плечо и предплечье – латеральная и медиальная поверхности.

Рисунок 13.

A – Scapula – Лопатка.

B – Humerus – Плечевая кость.

C – Radius – Лучевая кость.

D – Ulna – Локтевая кость.

E – Olecranon – Отросток локтевой кости.

Scapula – Лопатка

1. Scapular cartilage – Лопаточный хрящ.
2. Supraspinous fossa – Предостная ямка.
3. Spine of the scapula – Ость лопатки.
4. Infraspinous fossa – Заостная ямка.
5. Supraglenoid tubercle – Бугор. (НАДСУСТАВНОЙ БУГОРОК-ЛОПАТОЧНАЯ ШЕРОХОВАТОСТЬ)
6. Serrated face – Зубчатая поверхность.
7. Suprascapular fossa – Подлопаточная ямка.
8. Coracoid process – Клювовидный отросток.

Humerus – Плечевая кость

9. Lesser tubercle – Малый бугор.
10. Major teres tuberosity – Большая круглая шероховатость.
11. Medial epicondyle – Медиальный надмыщелок.
12. Greater tubercle – Большой бугор.
13. Head – Головка.
14. Deltoid tuberosity – Дельтовидная шероховатость.
15. Olecranon fossa – Локтевая ямка.
16. Radial fossa – Венечная ямка.
17. Trochlea of condyle – Блок плечевой кости.

18. Capitulum of condyle – Блок.

19. Lateral epicondyle – Латеральный надмыщелок.

Radius and ulna – Лучевая и локтевая кости.

20. Humeral articular surface – Венечный отросток.

21. Anconeal process – Крючковидный отросток.

22. Olecranon tuberosity – Локтевой бугор.

23. Radial tuberosity – Шероховатость луча.

24. Carpal articular surface of radius – Связочный бугор.

25. Lateral styloid process – Грифеливидный отросток.

FIGURE 13: THE SHOULDER AND FOREARM – Lateral and Medial Views

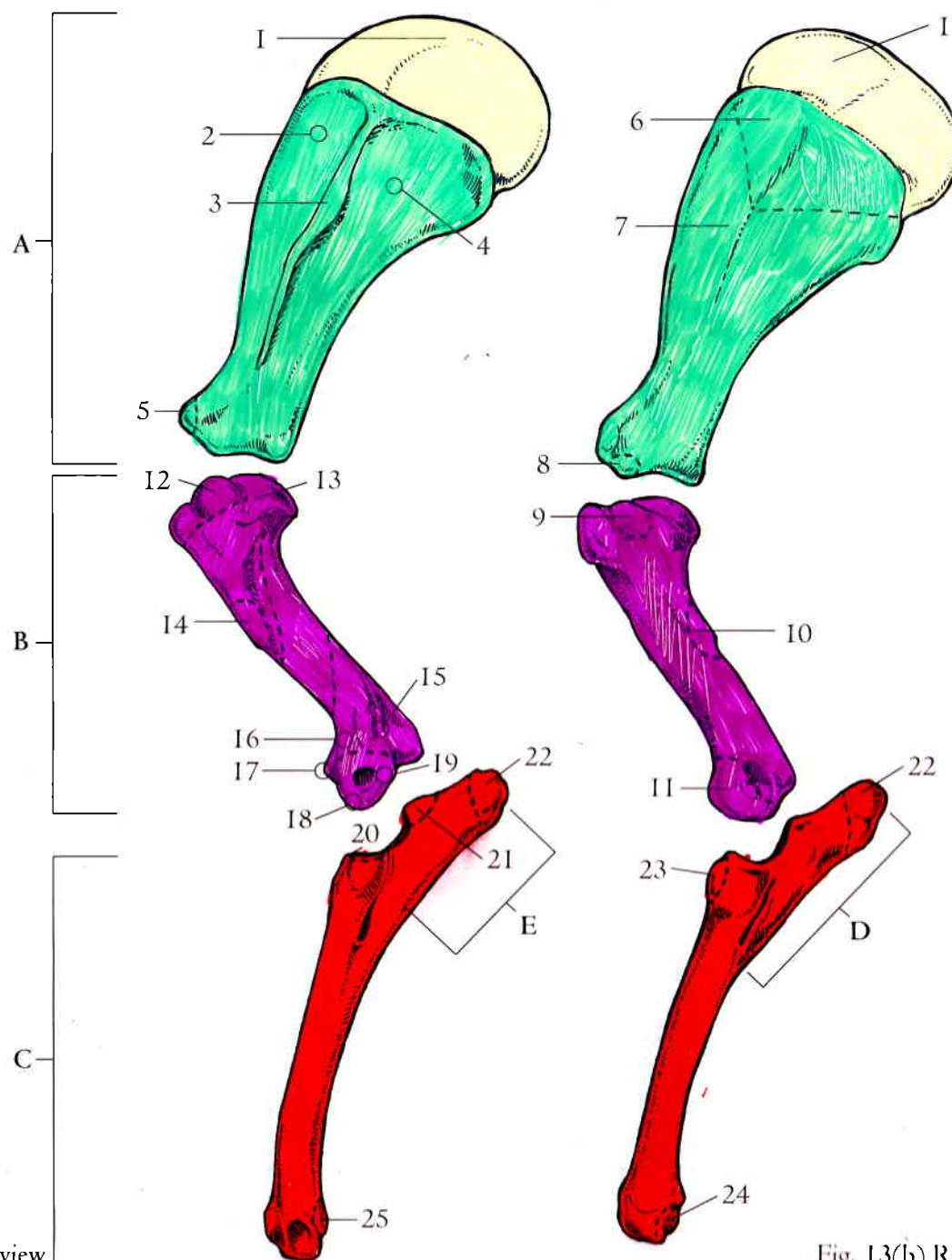


Fig. 13(a) Left shoulder – lateral view

Fig. 13(b) Right shoulder – medial view

The carpus – dorsal, lateral and palmar view.

Figure 14.

Запястье, или запястный сустав – дорсальная, латеральная и пальмарная поверхности.

Рисунок 14.

A – Radius – Луч.

1. Radial carpal bone – Лучевая кость запястья (ладьевидная к.).
2. Intermediate carpal bone – Промежуточная кость запястья (полулунная к.).
3. Ulnar carpal bone – Локтевая кость запястья (трехгранная к.).
4. Accessory carpal bone – Добавочная кость запястья (гороховидная к.)
5. 1st carpal bone – Первая запястная кость (часто отсутствует).
6. 2nd carpal bone – 2ая запястная кость.
7. 3rd carpal bone – 3ая запястная кость.
8. 4th carpal bone – 4ая запястная кость.
9. 2nd metacarpal bone – 2ая пястная кость.
10. 3rd metacarpal bone – 3ая пястная кость.
11. 4th metacarpal bone – 4ая пястная кость.

FIGURE 14: THE CARPUS – Dorsal, Lateral and Palmer Views

The Skeleton 35

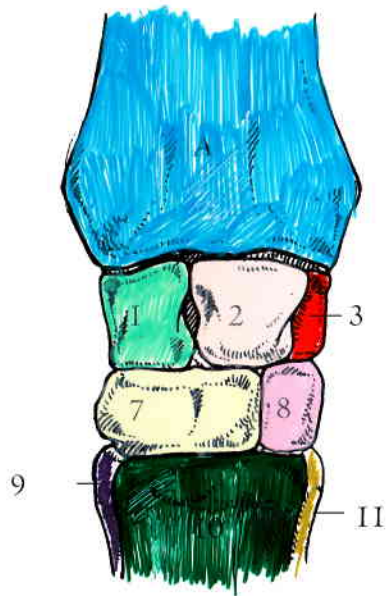


Fig. 14(a) Dorsal view

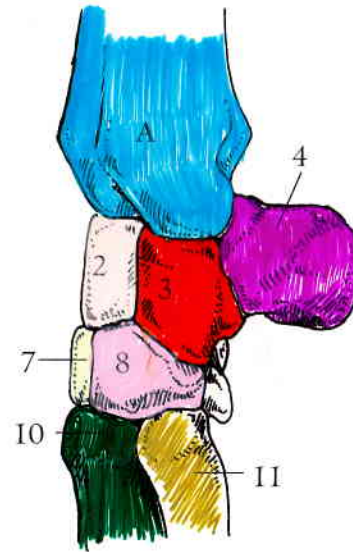


Fig. 14(b) Lateral view

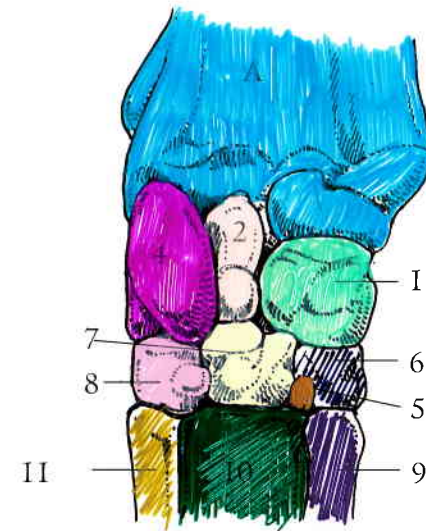


Fig. 14(c) Palmar view

Metacarpal and digital bones – dorsal and palmar views.

Figure 15.

Кости пясти и кости пальца – дорсальная и пальмарная поверхности.

Рисунок 15.

A – Cannon bone (3rd metacarpal) – Третья пястная кость.

B – Splint bone (2nd metacarpal – medial) – Вторая пястная кость (медиальная).

C – Splint bone (4th metacarpal – lateral) – Четвертая пястная кость (латеральная).

D – Long pastern bone (1st phalanx) – Венечная кость (первая фаланга).

E – Short pastern bone (2nd phalanx) – Путовая кость (вторая фаланга).

F – Navicular bone (distal sesamoid bone) – Челночная кость (дистальная сезамовидная кость).

G – Coffin bone (3rd phalanx) – Копытовидная кость (третья фаланга).

H – Lateral proximal sesamoid bone – Латеральная проксимальная сезамовидная кость.

I – Medial proximal sesamoid bone – Медиальная проксимальная сезамовидная кость.

1. Metacarpal tuberosity – Пястная шероховатость.
2. Ridge on distal articular surface – Суставной блок с гребнем.
3. Extensor process of 1st phalanx – Связочный бугор первой фаланги.
4. Articular surface of navicular bone – Суставная поверхность челночной кости.
5. Flexor surface of navicular bone – Сгибательная поверхность челночной кости.
6. Extensor process of coffin bone – Разгибательный отросток копытовидной кости.
7. Lateral cartilages – Хрящи.
8. Flexor surface of coffin bone – Сгибательная поверхность копытовидной кости.
9. Semilunar line – Подошвенная поверхность.

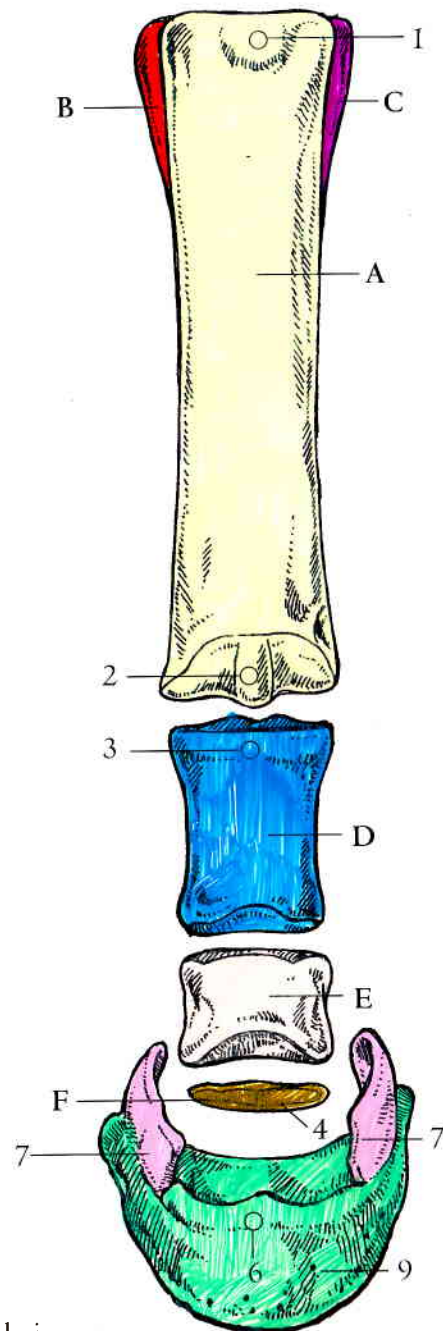


Fig. 15(a) Dorsal view

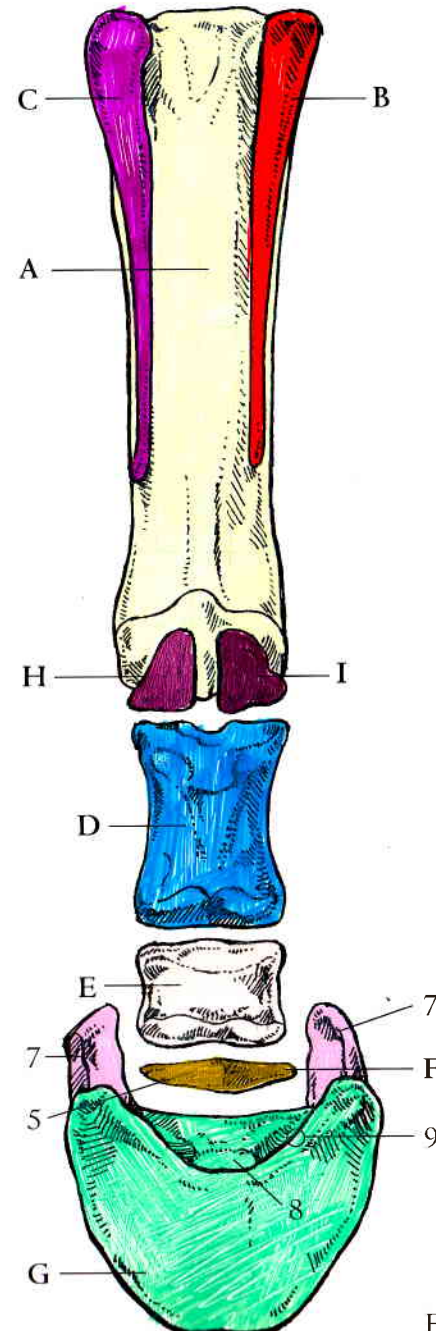


Fig. 15(b) Palmar view

The skull – lateral, ventral and cranial views.

Figure 16.

Череп – латеральная, вентральная и краниальная поверхности.

Рисунок 16.

Рис 16 (а) Правая латеральная поверхность.

A – Incisive bone – Резцовая кость.

B – Nasal bone – Носовая кость.

C – Frontal bone – Лобная кость.

D – Lacrimal bone – Слезная кость.

E – Zygomatic bone – Скуловая кость.

F – Parietal bone – Теменная кость.

G – Temporal bone – Височная кость.

H – Mandible – Нижняя челюсть.

I – Maxilla – Верхняя челюсть.

J – Zygomatic arch – Скуловая дуга.

K – Zygomatic process – Скуловой отросток.

L – Facial crest – Лицевой гребень.

1. Mental foramen – Подбородочное отверстие.
2. Infraorbital foramen – Подглазничное отверстие.
3. Supraorbital foramen – Надглазничное отверстие.
4. Nuchal crest – Затылочный гребень.
5. Occipital condyle – Затылочный мыщелок.
6. Jugular process bone – Яремный отросток.
7. External acoustic meatus – Наружный слуховой проход.

Рис 16 (b) Вентральная поверхность, верхняя челюсть.

A – Occipital bone – Затылочная кость.

B – Temporal bone – Височная кость.

C – Basisphenoid bone – Клиновидная кость.

D – Vomer – Сошник.

E – Zygomatic bone – Скуловая кость.

F – Palatine bone – Небная кость.

G – Maxilla – Верхняя челюсть.

H – Incisive bone – Резцовая кость.

1. Occipital condyle – Затылочный мыщелок.
2. Jugular process bone – Яремный отросток.
3. Foramen lacerum – Слезное отверстие.
4. Orbital fissure –
5. Caudal alar foramen –
6. Hamulus of pterygoid bone – Крыловидная кость.
7. Incisive canal – Резцовый канал.
8. Molar teeth – Моляры.
9. Premolar teeth – Премоляры.
10. Canine teeth – Клыки.
11. Incisor teeth – Резцы.

Рис 16 (с) Краниальная поверхность.

A – Parietal bone – Теменная кость.

B – Frontal bone – Лобная кость.

C – Nasal bone – Носовая кость.

D – Maxilla – Верхняя челюсть.

E – Incisive bone – Резцовая кость.

F – Lacrimal bone – Слезная кость.

G – Zygomatic bone – Скуловая кость.

H – Nuchal crest – Затылочный гребень.

I – Coronoid process of mandible in external fossa – Мышечный отросток нижней челюсти.

J – Supraorbital foramen – Надглазничное отверстие.

K – Infraorbital foramen – Подглазничное отверстие.

L – Incisive foramen – Резцовая ямка.

M – Nasal peak – Носовая кость.

N – Incisor teeth – Резцы.

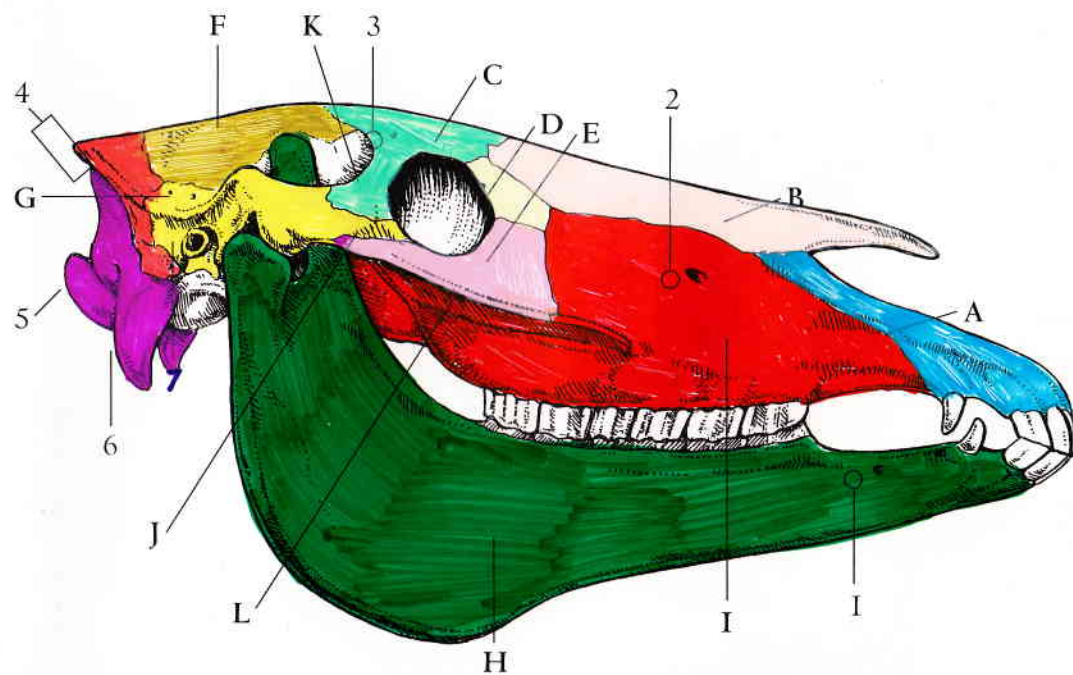


Fig. 16(a) Right lateral view

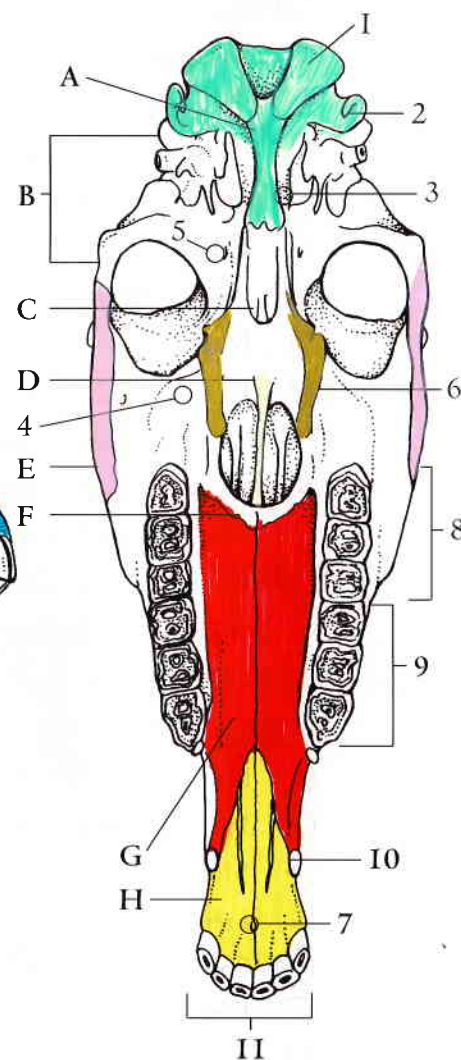


Fig. I6(b) Ventral view, mandible removed

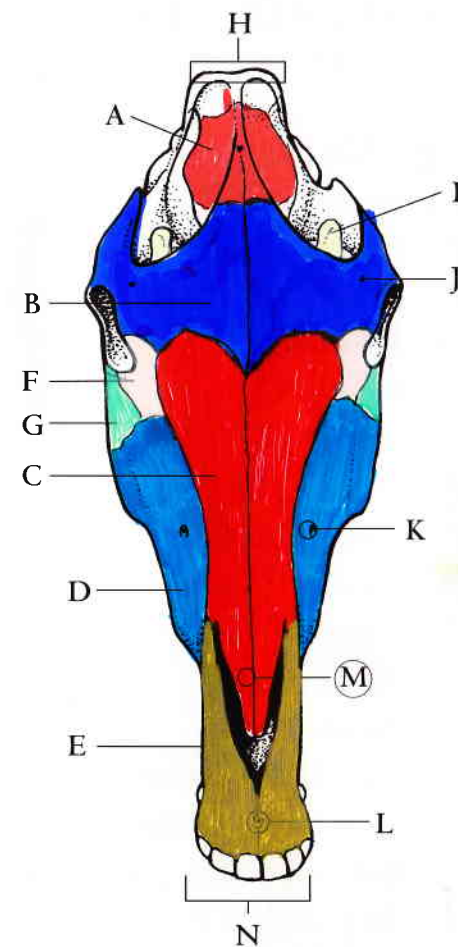


Fig. 16(c) Cranial view

Skeleton and surface features – cranial view.

Figure 17.

Скелет и его поверхностные части – краниальная поверхность.
Рисунок 17.

17(a) Скелет.

1. Frontal bone – Лобная кость.
2. Nasal bone – Носовая кость.
3. Facial bone – Скуловая кость.
4. Nasal peak – Носовой отросток.
5. Mandible – Нижняя челюсть.
6. Scapula – Лопатка.
7. Cervical vertebrae – Шейные позвонки.
8. Humerus – Плечевая кость.
9. Sternum – Грудина.
10. Radius – Лучевая кость.
11. Carpal bones – Кости запястья.
12. Large metacarpal – Главная кость пясти.
13. 1st phalanx – Первая фаланга.
14. 2nd phalanx – Вторая фаланга.
15. 3rd phalanx – Третья фаланга.

17(b) Поверхностные детали и суставы.

1. External occipital protuberance – Наружный теменной гребень.
2. Zygomatic arch – Скуловая дуга.
3. Facial crest – Лицевой гребень.
4. Temporal line of frontal bone – Височная линия лобной кости.
5. Nasal process of incisive bone – Носовой отросток резцовой кости.
6. Nasal peak – Носовой отросток.
7. Scapular cartilage – Лопаточный хрящ.
8. Spine of scapula – Ость лопатки.
9. Supraglenoid tuberosity of scapula – шероховатость лопатки.
10. Lesser tubercle of humerus – Малый бугор плечевой кости.
11. Cranial part of greater tubercle of humerus – Краниальная часть большого бугра плечевой кости.

12. Deltoid tuberosity of humerus – Дельтовидная шероховатость плечевой кости.
13. Lateral epicondyle of humerus – Латеральный надмыщелок плечевой кости.
14. Medial epicondyle of humerus – Медиальный надмыщелок плечевой кости.
15. Lateral radial tuberosity – Латеральная шероховатость луча.
16. Medial radial tuberosity – Медиальная шероховатость луча.
17. Lateral styloid process of radius – Латеральный шиловидный отросток лучевой кости.
18. Medial styloid process of radius – Медиальный шиловидный отросток лучевой кости.
19. 2nd metacarpal bone – Вторая пястная кость.
20. Metacarpal tuberosity – Пястная шероховатость.
21. 3rd metacarpal bone – Третья пястная кость.
22. 1st phalanx – Первая фаланга.

A – Scapulohumeral (shoulder) joint – Плечелопаточный (плечевой) сустав.

B – Cubital (elbow) joint – Локтевой (локоть) сустав.

C – Antebrachiocarpal (knee) joint – Запястный сустав.

D – Metacarpophalangeal (fetlock) joint – Пястно-фаланговый (путовый) сустав.

E – Proximal interphalangeal (pastern) joint – Венечный сустав.

F – Distal interphalangeal (coffin) joint – Копытный сустав.

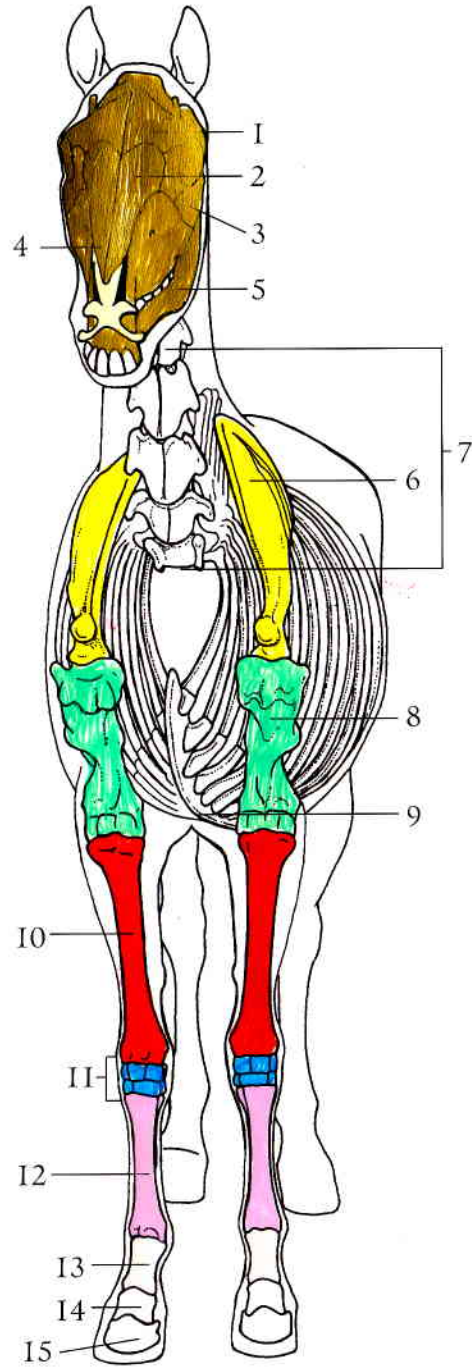


Fig. 17(a) Skeleton

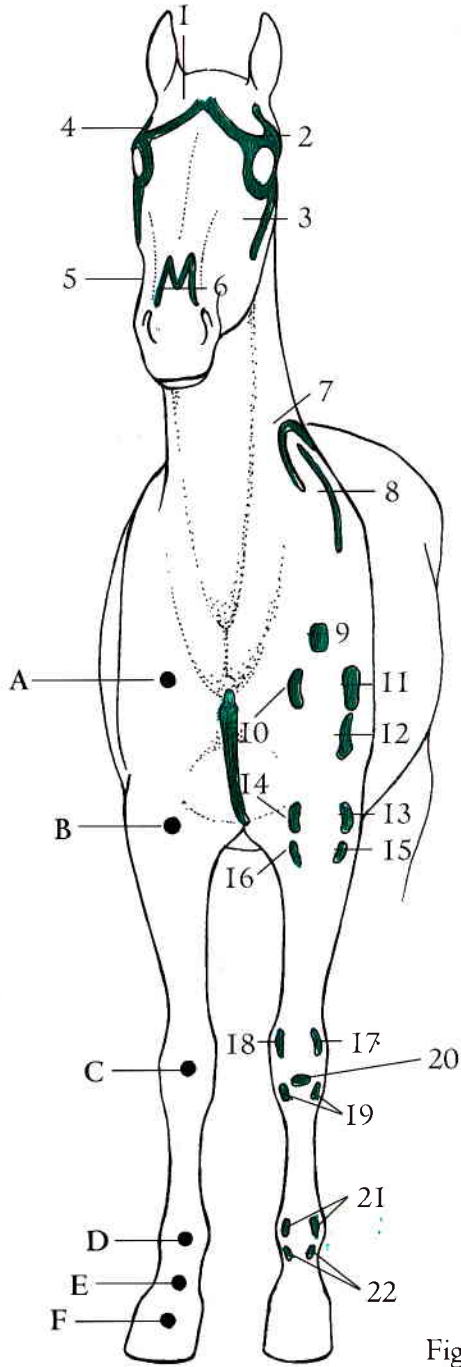


Fig. 17(b) Surface features and joints

SKELETON AND SURFACE FEATURES – Caudal View

(Figure 18)

Fig. 18(a) Skeleton

Identify and colour:

- ① Os coxae (pelvic bone)
- ② Caudal vertebrae
- ③ Femur
- ④ Patella
- ⑤ Fibula
- ⑥ Tibia
- ⑦ Tarsal bones
- ⑧ Small metatarsal M4, or lateral splint bone
- ⑨ Small metatarsal M2, or medial splint bone
- ⑩ Large metatarsal M3, or hind cannon
- ⑪ Proximal sesamoid bones
- ⑫ 1st phalanx (long pastern bone)
- ⑬ 2nd phalanx (short pastern bone)
- ⑭ 3rd phalanx (pedal bone)
- ⑮ Distal sesamoid bone

Fig. 18(b) Surface Features and Joints

Identify and colour:

- ① Sacral spinous processes
- ② Sacral tuber of ilium (point of croup)
- ③ Coxal tuber of ilium (point of haunch)
- ④ Caudal part of greater femoral trochanter
- ⑤ Ischiatic tuber of ischium (point of buttock)

- ⑥ Lateral epicondyle of femur
- ⑦ Medial epicondyle of femur
- ⑧ Head of fibula
- ⑨ Medial tibial condyle
- ⑩ Calcaneal tuber (point of hock)
- ⑪ Lateral malleolus of tibia
- ⑫ Bases of splint bones
- ⑬ Medial malleolus of tibia
- ⑭ Talus (tibial tarsal bone)
- ⑮ Proximal plantar sesamoid bones
- ⑯ Lateral cartilages
- ⑰ Buttons of medial and radial splint bones

The coloured surface features should also be located on Fig. 18(a).

Locate the following joints on Fig. 18(a) Skeleton and label them:

- A Hip joint
- B Stifle joint
- C Crurotarsal joint
- D Fetlock
- E Pastern joint

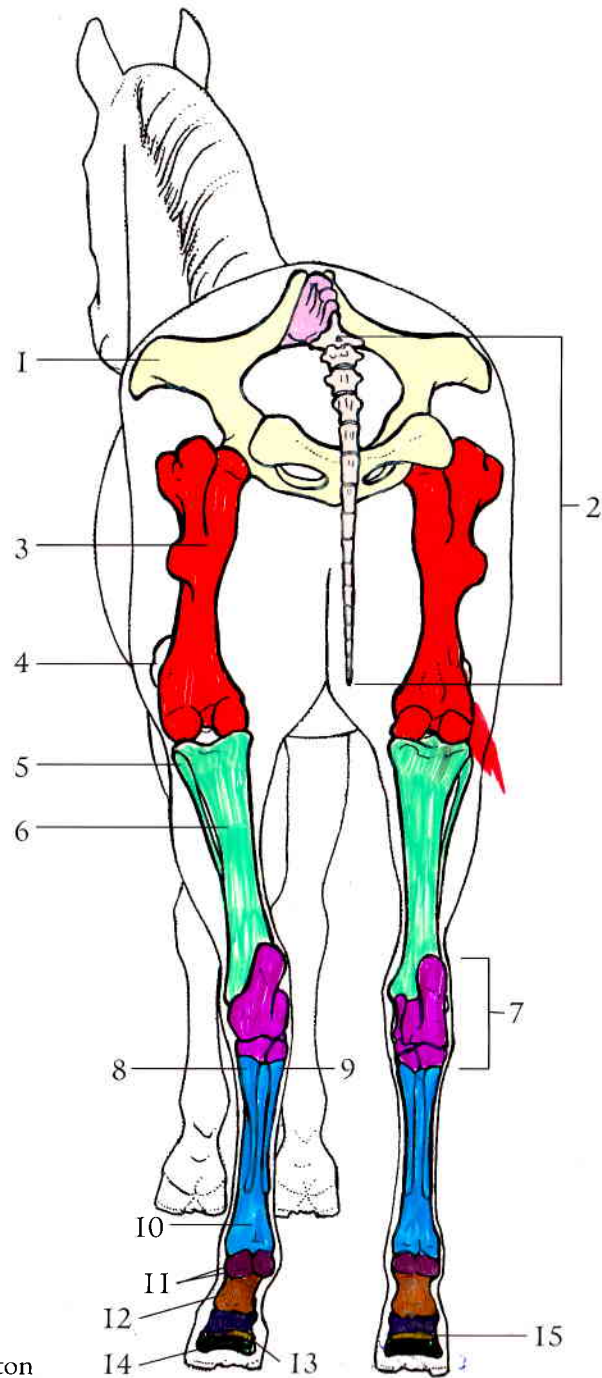


Fig. 18(a) Skeleton

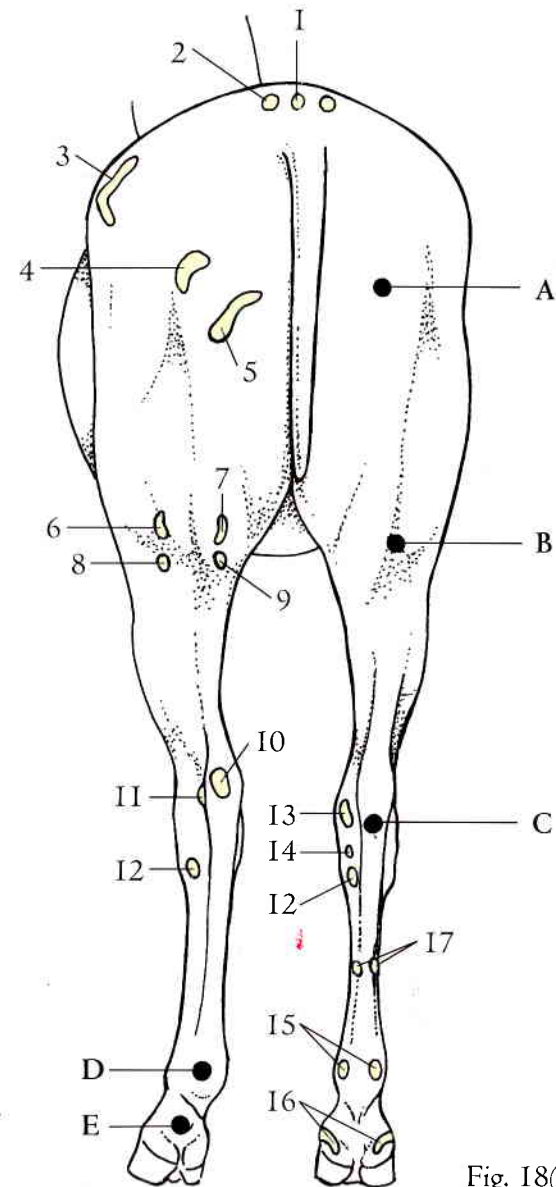


Fig. 18(b) Surface features and joints

Ligaments of the skeleton – lateral view.

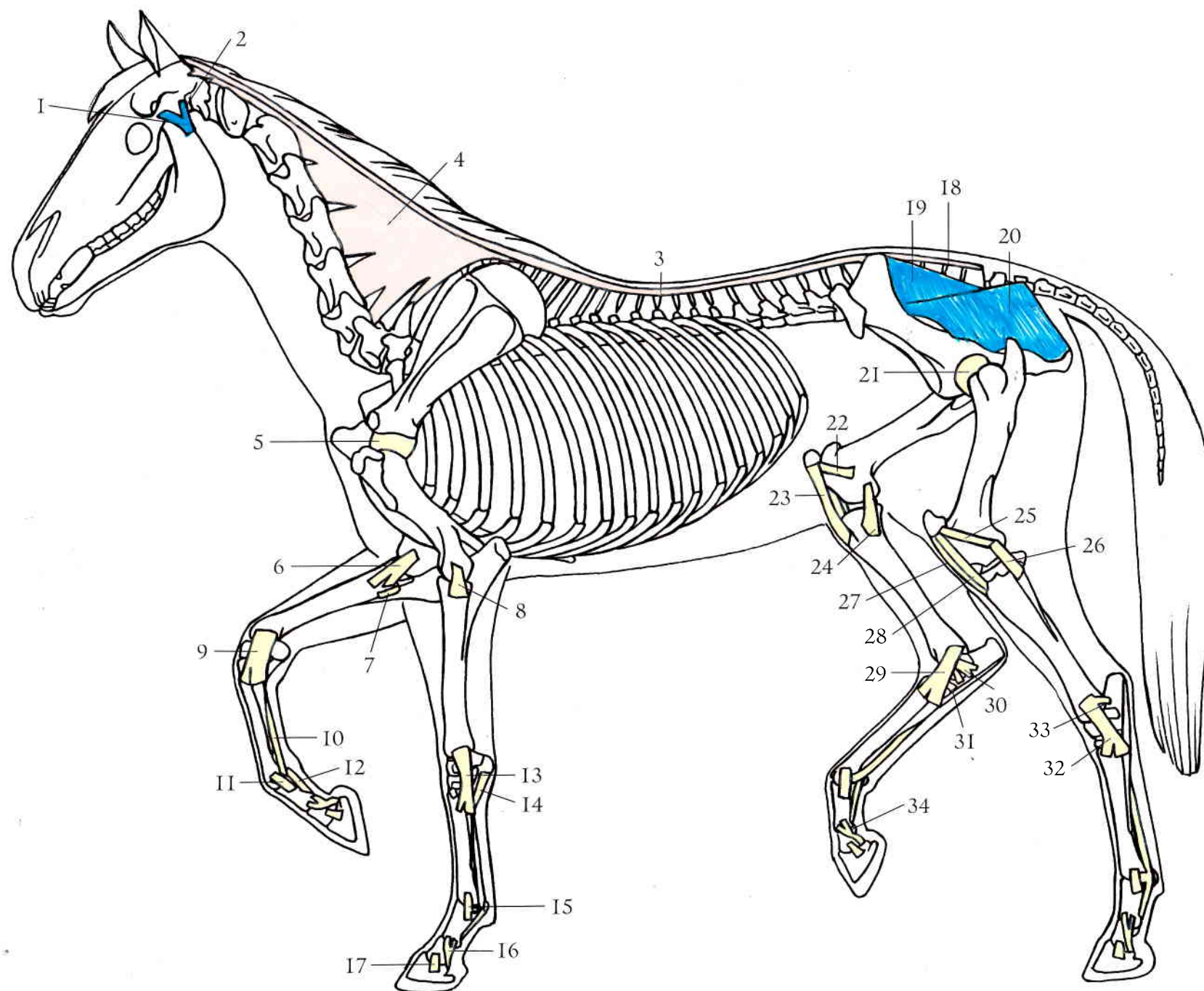
Figure 19.

Связки скелета – латеральная поверхность.

Рисунок 19.

1. Lateral ligament of jaw joint – Латеральная связка височно-нижнечелюстного сустава.
2. Caudal ligament of jaw joint – Каудальная связка височно-нижнечелюстного сустава.
3. Supraspinous ligament – Надостистая связка.
4. Lamellar part of nuchal ligament – Пластинчатая часть выйной связки.
5. Capsular ligament of shoulder joint – Капсулярная связка плечевого сустава.
6. Medial collateral ligament of elbow joint – Медиальная коллатеральная связка лучевого сустава.
7. Medial transverse radioulnar ligament – Поперечные луче-локтевые связки.
8. Lateral collateral ligament of elbow joint – Латеральная коллатеральная связка локтевого сустава.
9. Medial collateral ligament of carpal joint – Медиальная коллатеральная связка запястного сустава.
10. Suspensory ligament – Подвешивающая связка.
11. Medial collateral ligament of fetlock joint – Медиальная коллатеральная связка путового сустава.
12. Distal or inferior sesamoidean ligament – Дистальная сезамовидная связка.
13. Lateral collateral ligament of carpal joint – Латеральная коллатеральная связка запястного сустава.
14. Distal ligament of the accessory carpal bone – Дистальная связка добавочной кости запястья.
15. Lateral collateral sesamoidean ligament – Латеральная коллатеральная связка сезамовидных костей.
16. Lateral collateral ligament of pastern joint – Латеральная коллатеральная связка венечного сустава.
17. Lateral collateral ligament of coffin joint – Латеральная коллатеральная связка копытного сустава.
18. Dorsal sacroiliac ligament – Дорсальная крестцово-подвздошная связка.
19. Lateral sacroiliac ligament – Латеральная крестцово-подвздошная связка.
20. Sacrosciatic ligament – Крестцово-седалищная связка.
21. Capsular ligament of hip joint – Капсулярная связка тазобедренного сустава.
22. Medial femoropatellar ligament – Медиальная связка чашечно-бедренного сустава.
23. Medial patellar ligament – Медиальная связка коленной чашечки.
24. Medial collateral ligament of stifle joint – Медиальная коллатеральная связка бедро-берцового сустава.
25. Lateral femoropatellar ligament – Латеральная связка чашечно-бедренного сустава.
26. Lateral collateral ligament of stifle joint – Латеральная коллатеральная связка бедро-берцового сустава.
27. Middle patellar ligament – Средняя связка коленной чашечки.
28. Lateral patellar ligament – Латеральная связка коленной чашечки.
29. Medial collateral ligament of tarsal joint – Медиальная коллатеральная связка скакательного сустава.
30. Branches of medial collateral ligament – Коллатеральная медиальная связка заплюсневого сустава.
31. Plantar ligament – Плантарная связка.
32. Lateral collateral ligament of tarsal joint – Латеральная коллатеральная связка скакательного сустава.
33. Ligament connecting talus and calcaneus – Связка таранной и пяточной кости.
34. Suspensory ligament of navicular bone – Прокисмальная челночная связка.

FIGURE 19: LIGAMENTS OF THE SKELETON – Lateral View



Ligament of the pelvis and vertebrae.

Figure 20.

Связки таза и позвонков.

Рисунок 20.

Рис 20 (а) Связки тазобедренного сустава – вентральная поверхность и (b) крестцово-подвздошные связки.

1. Ventral sacroiliac ligament – Вентральная крестцово-подвздошная связка.
2. Sacrosciatic ligament – Крестцово-седалищная связка.
3. Accesory femoral ligament – Добавочная бедренная связка.
4. Articular capsule (capsular ligament) of hip joint – Капсулярная связка тазобедренного сустава.
5. Ligament of femoral head (round ligament) – Связка головки бедра.
6. Transverse acetabular ligament – Поперечная связка вертлужной впадины.
7. Dorsal sacroiliac ligament – Дорсальная крестцово-подвздошная связка.

Рис 20 (с) Связки позвонков – средний разрез и (d) связки головки ребра.

1. Supraspinous ligament - Надостистая связка.
2. Costotransverse ligament – Реберно-поперечная связка.
3. Intra-articular ligament of rib head – Внутрисуставная связка головки ребра.
4. Radiate ligament of costal head – Радиальная связка головки ребра.
5. Ventral longitudinal ligament – Вентральная продольная связка.
6. Dorsal longitudinal ligament – Дорсальная продольная связка.
7. Interspinal ligament – Межостистые связки.
8. Interarcuate ligament – Междужковые связки.

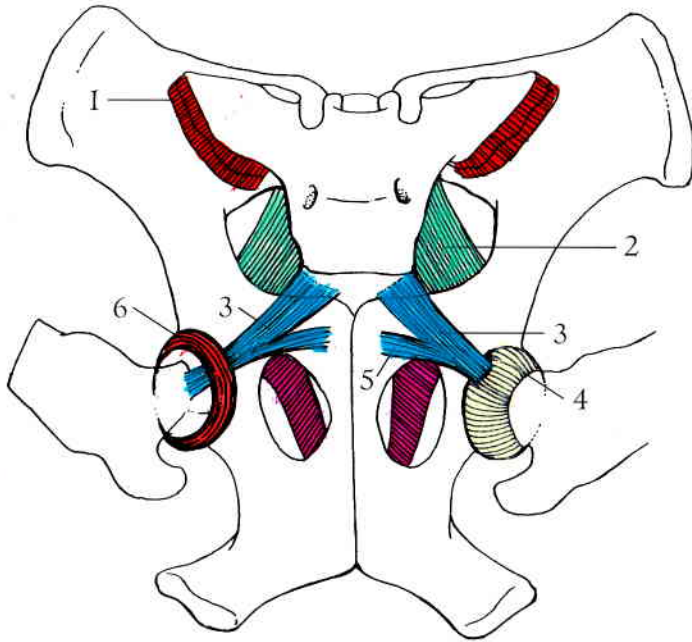


Fig. 20(a) Accessory ligaments of the hip joints – ventral view

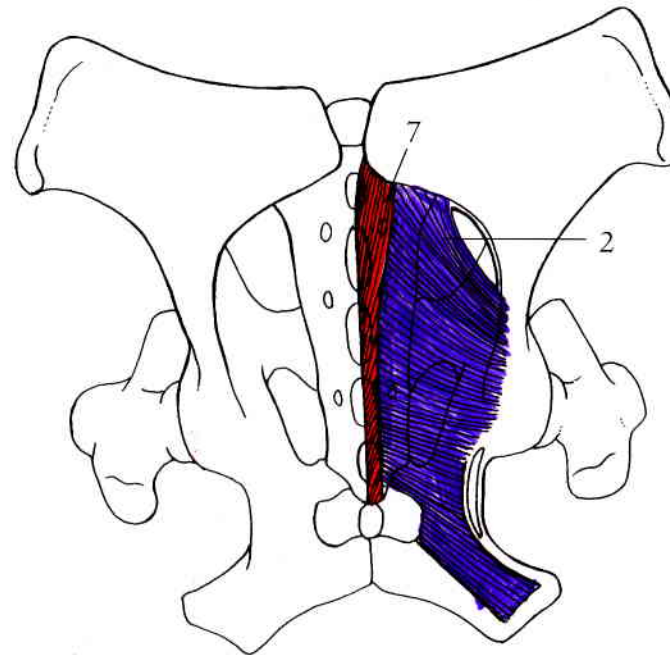


Fig. 20(b) Sacrospinous ligaments – dorsal view

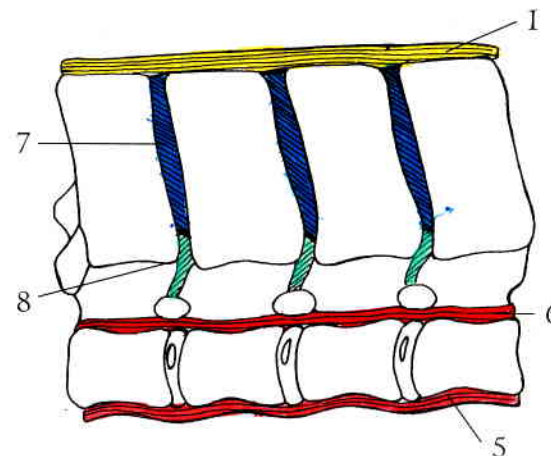


Fig. 20(c) Ligaments of the spine – median section

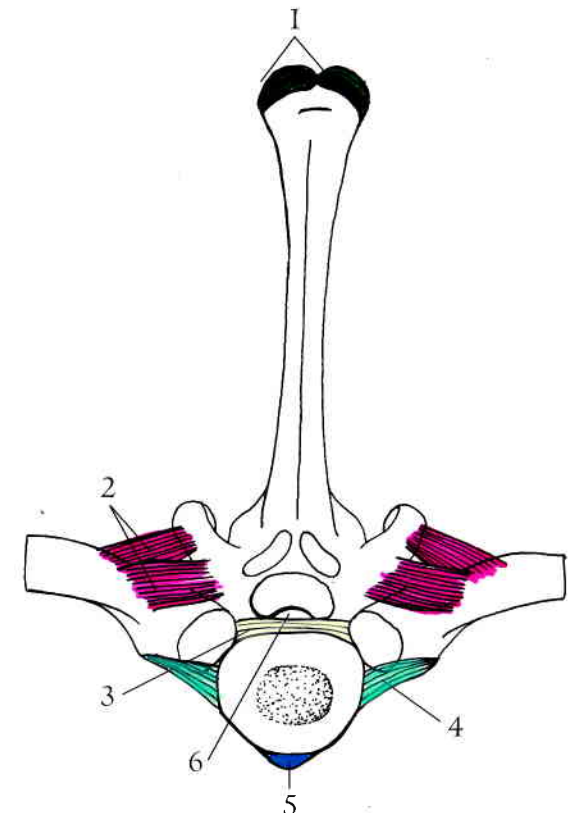


Fig. 20(d) Ligaments of the rib heads – cranial view

Ligament of the lower limb and foot – various views.

Figure 21.

Связки конечности и копыта.

Рисунок 21.

1. Medial collateral carpal ligament – Медиальная коллатеральная запястная связка.
2. Lateral collateral carpal ligament – Латеральная коллатеральная запястная связка.
3. Intercarpal ligament – Межзапястные связки.
4. Carpometacarpal ligament – Запястно-паястные связки.
5. Medial and lateral collateral ligament of pastern joint – Медиальная и Латеральная коллатеральная связки путового сустава.
6. Extensor branches of suspensory ligament – Разгибательные ветви подвешивающей связки.
7. Medial and lateral chondrocompedal ligament – Медиальные и латеральные хрящево-путовые связки.
8. Medial and lateral collateral ligament of pastern joint – Медиальная и Латеральная коллатеральная связки венечного сустава.
9. Suspensory navicular ligament – Подвешивающие челночные связки.
10. Medial and lateral chondrocoronal ligament – Медиальные и латеральные хрящево-венечные связки.
11. Medial and lateral collateral ligament of coffin joint – Медиальная и Латеральная коллатеральная связки копытного сустава.
12. Medial and lateral collateral ligament of fetlock joint – Медиальная и Латеральная коллатеральная связки путового сустава.
13. Common digital extensor tendon (cut) – Сухожилие общего пальцевого разгибателя.
14. Proximal ligament of accessory carpal bone – Проксимальная связка добавочной кости.
15. Distal ligaments of accessory carpal bone – Дистальная связка добавочной кости.
16. Suspensory ligaments – Подвешивающая связка.
17. Medial and lateral collateral sesamoidean ligaments of fetlock joint – Медиальная и Латеральная коллатеральные сезамовидные связки путового сустава.
18. Oblique distal sesamoidean ligaments – Косые дистальные сезамовидные связки.
19. Straight distal sesamoidean ligaments – Прямые дистальные сезамовидные связки.
20. Abaxial palmar ligament of pastern joint – Абаксиальная пальмарная связка венечного сустава.
21. Medial and lateral chondroungular ligaments – Медиальная и Латеральная хрящево-копытные связки.
22. Superficial digital flexor tendon – Сухожилие поверхностного пальцевого сгибателя.
23. Intersesamoidean ligament – Межсезамовидная связка.
24. Distal navicular ligament – Дистальная челночная связка.
25. Cruciate distal sesamoiden ligament – Крестовидные дистальные сезамовидные связки.
26. Suspensory ligaments bifurcation – Бифуркация подвешивающей связки.
27. Short distal sesamoidean ligament – Короткие дистальные сезамовидные связки.
28. Axial palmar ligament of pastern joint – Аксиальная пальмарная связка венечного сустава.

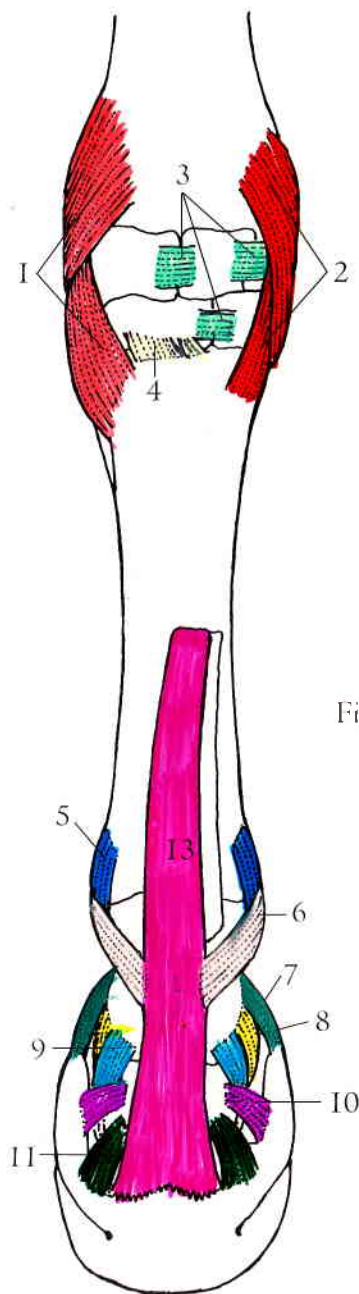


Fig. 21(a) Lower forelimb – cranial view

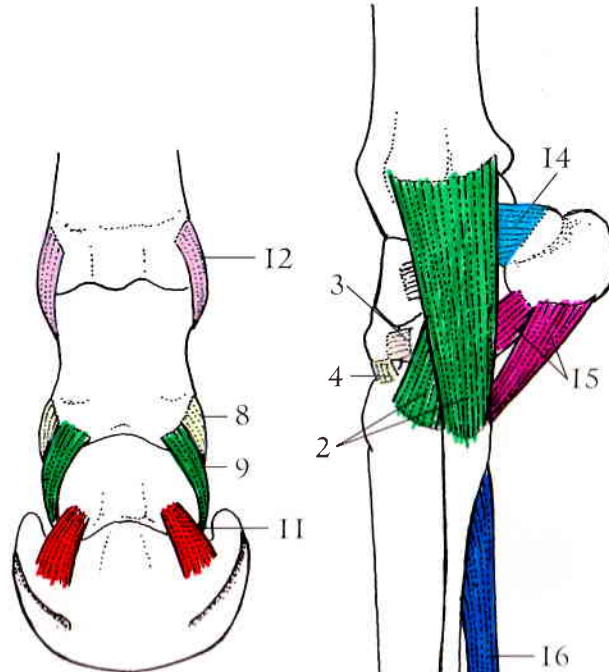


Fig. 21(b) Foot – cranial view

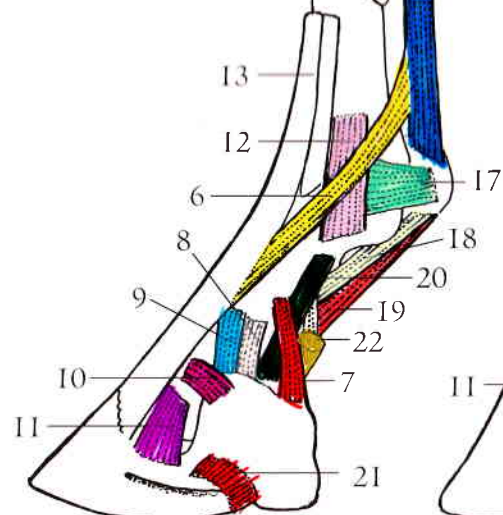


Fig. 21(c) Lower forelimb – lateral view

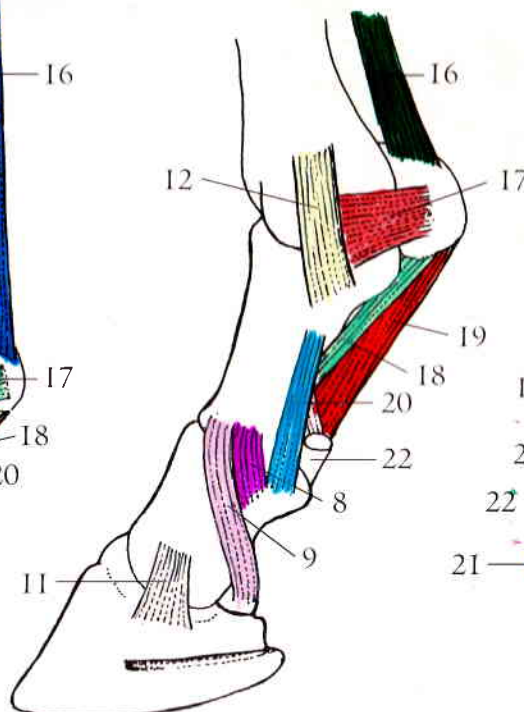


Fig. 21(d) Foot – lateral view

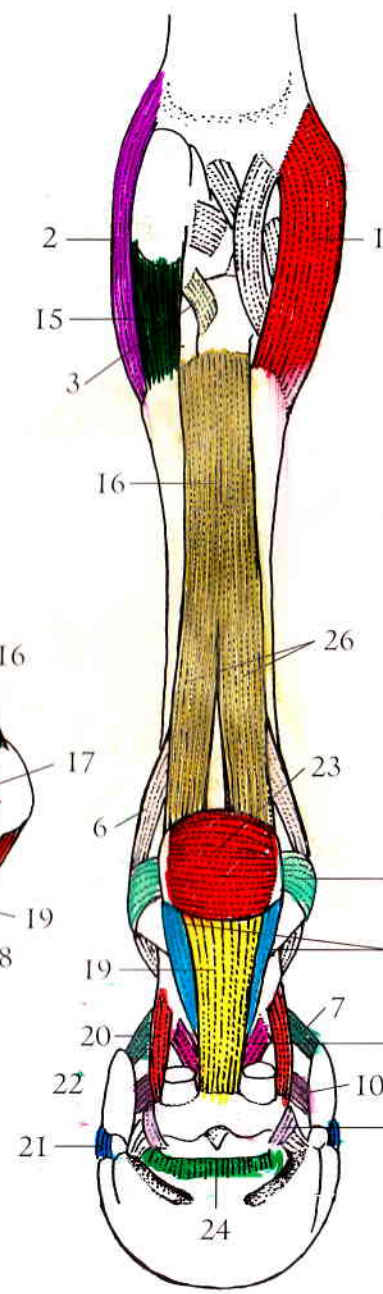


Fig. 21(e) Lower forelimb – caudal view

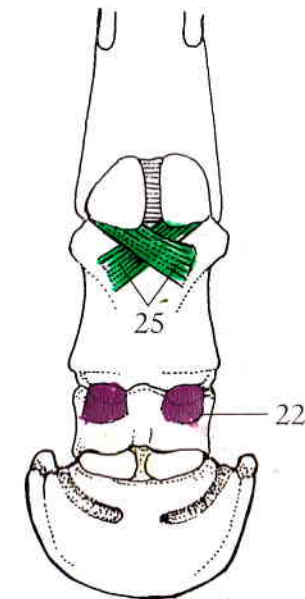


Fig. 21(f) Foot – caudal view 1

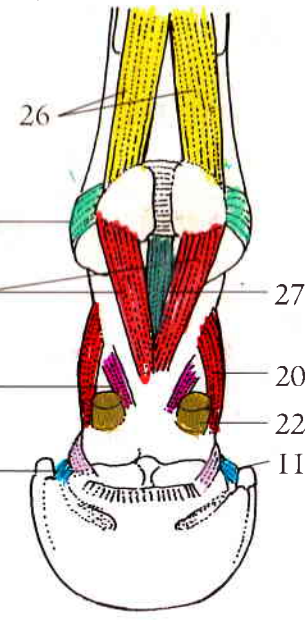


Fig. 21(g) Foot – caudal view 2

Ligament of the stifle joint – medial, cranial and lateral views.

Figure 22.

Связки коленного сустава – медиальная, краниальная и латеральная поверхности.

Рисунок 22.

A – Patella – Коленная чашечка.

B – Peripatellar cartilage – Волокнистый хрящ коленной чашечки.

C – Tibial tuberosity – Шероховатость большеберцовой кости.

D – Fibula – Малоберцовая кость.

1. Medial patellar ligament – Медиальная связка коленной чашечки.
2. Medial ridge of trochlea – Медиальный мыщелок коленной чашечки.
3. Middle patellar ligament – Средняя связка коленной чашечки.
4. Lateral patellar ligament – Латеральная связка коленной чашечки.
5. Medial collateral ligament – Коллатеральная медиальная связка коленной чашечки.
6. Medial meniscus – Медиальный мениск.
7. Lateral meniscus – Латеральный мениск.
8. Lateral collateral ligament – Коллатеральная латеральная связка коленной чашечки.
9. Medial femoropatellar ligament – Боковая медиальная связка коленной чашечки.
10. Lateral femoropatellar ligament – Боковая латеральная связка коленной чашечки.

**FIGURE 22: LIGAMENTS OF THE STIFLE JOINT –
Medial, Cranial and Lateral Views**

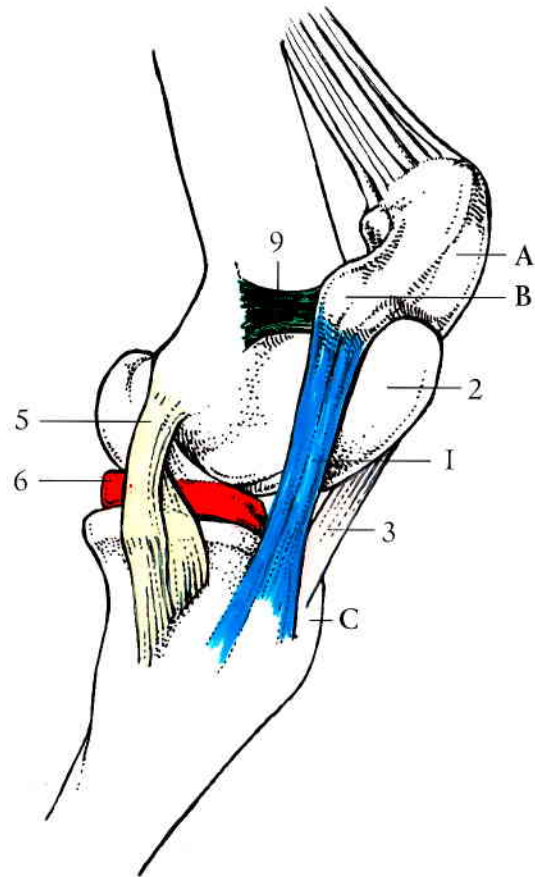


Fig. 22(a) Medial view

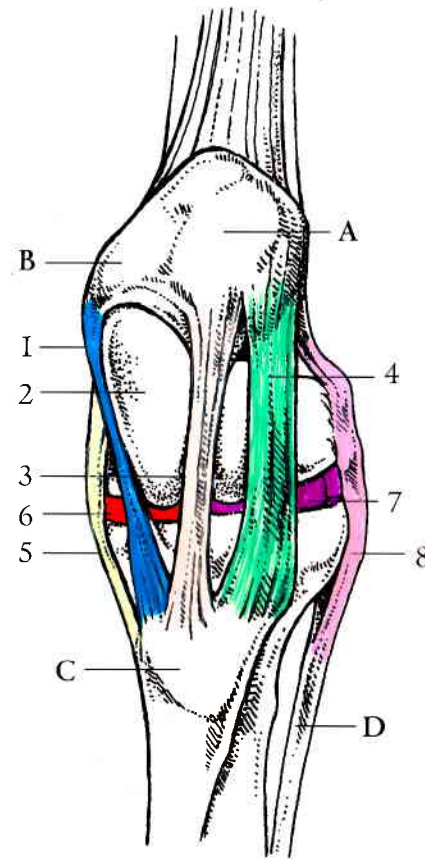


Fig. 22(b) Cranial view

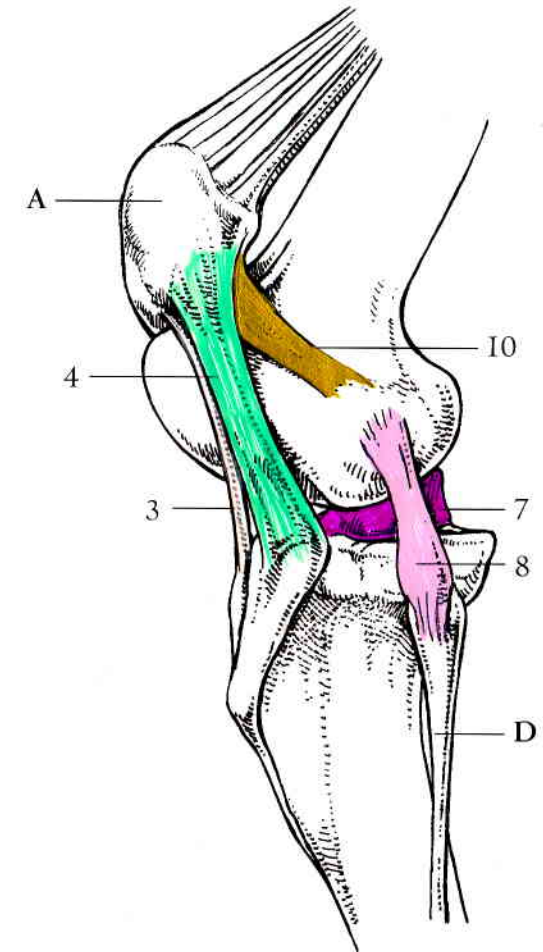


Fig. 22(c) Lateral view

Ligament of the hock – cranial, lateral and caudal views.

Figure 23.

Связки скакательного сустава – краниальная, латеральная и каудальная поверхности.
Рисунок 23.

A – Trochlea of talus – Блок таранной кости.

B – Calcaneal tuber – Пяточный бугор.

C – Sustentaculum tali – Держатель таранной кости.

1. Long and short medial collateral tarsal ligaments – Длинный и короткие коллатеральные медиальные связки скакательного сустава.
2. Long and short lateral collateral tarsal ligaments – Длинный и короткие коллатеральные латеральные связки скакательного сустава.
3. Dorsal tarsal ligament – Дорсальная заплюсневая связка.
4. Tarsometatarsal ligament – Заплюснево-плюсневая связка.
5. Long plantar ligament – Длинная плантарная связка.
6. Plantar tarsal ligament – Заплюсневая плантарная прямая связка.

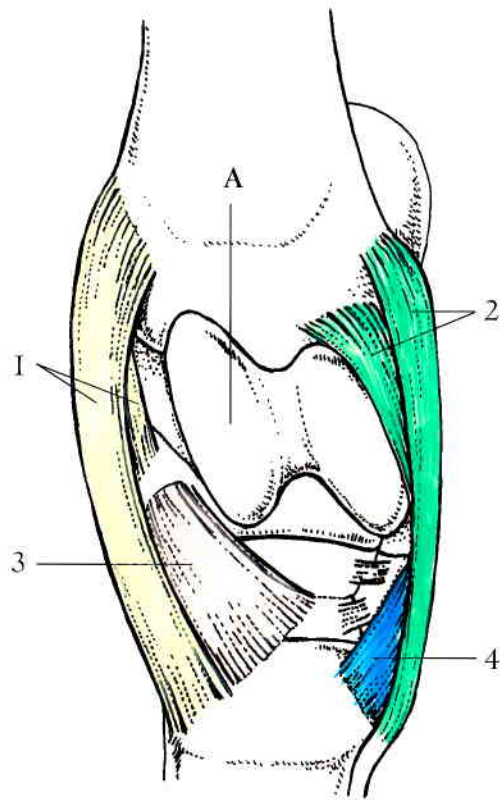


Fig. 23(a) Cranial view

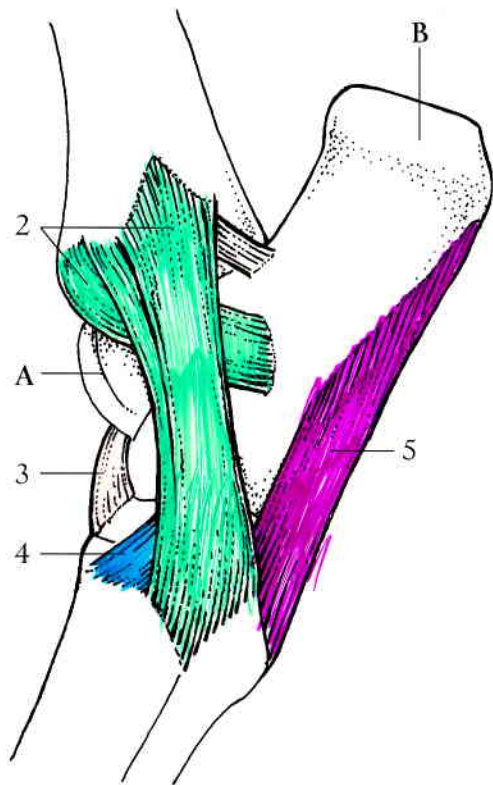


Fig. 23(b) Lateral view

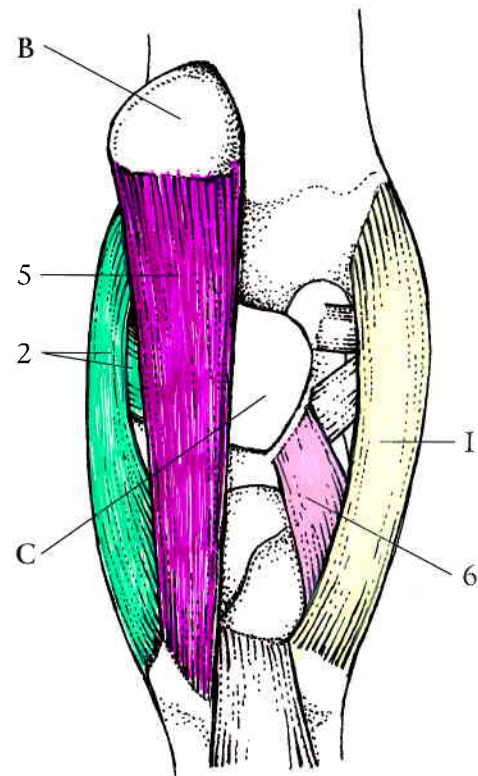


Fig. 23(c) Caudal view

Superficial muscles – lateral view.

Figure 24.

Поверхностные мышцы – латеральная поверхность.

Рисунок 24.

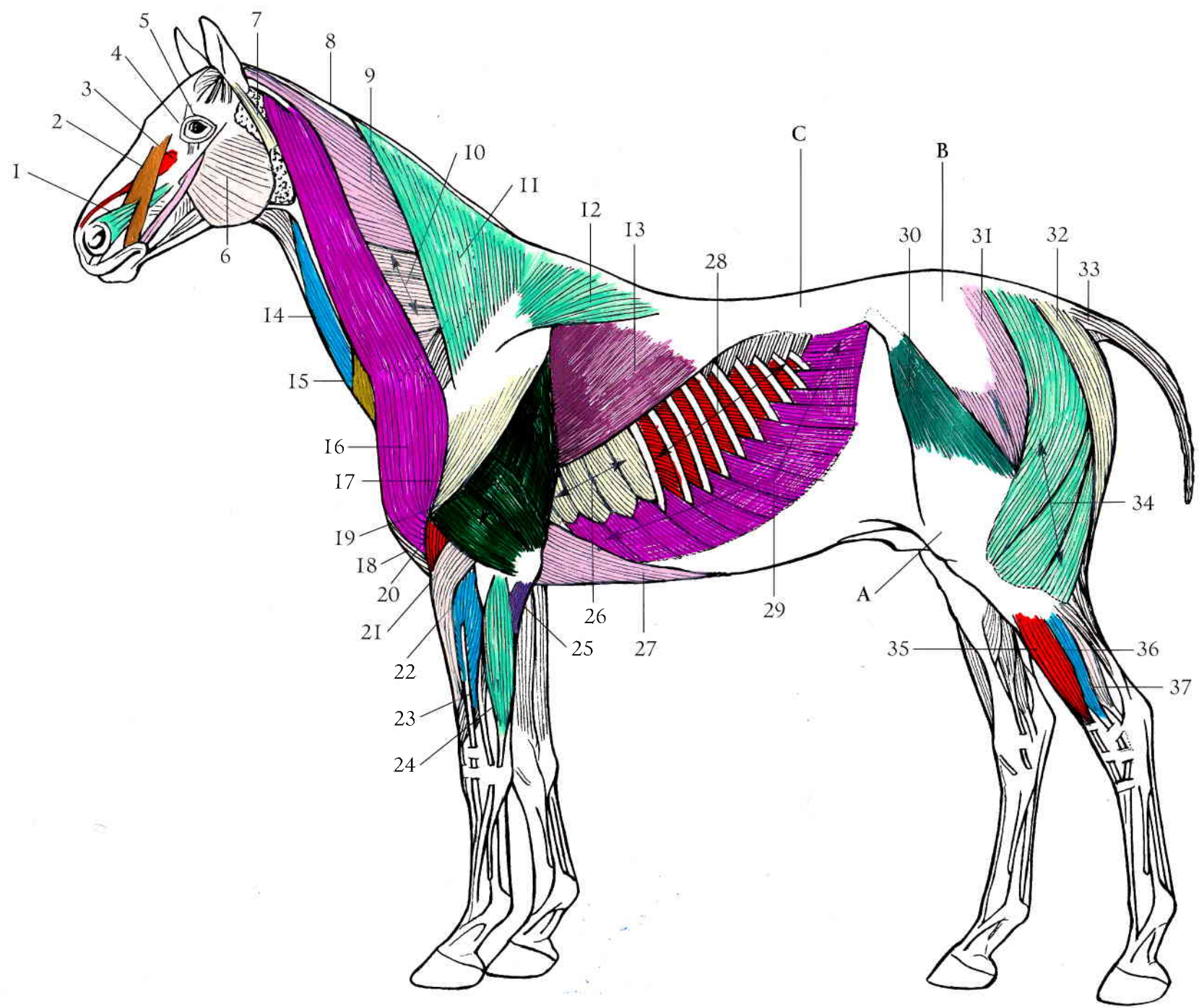
A – Lateral crural fascia – Широкая фасция бедра.

B – Gluteal fascia – Ягодичная фасция.

C – Thoracolumbar fascia – Пояснично-спинная фасция.

1. Lateral nostril dilator muscles – Клыковая мышца.
2. Levator muscle of upper lip and wing of nostril – Носогубный подниматель.
3. Superior labial levator muscle – Специальный подниматель верхней губы.
4. Orbicularis oculi muscle – Круговая мышца век.
5. Levator muscle of medial angle of eye – Наружный подниматель верхнего века.
6. Masseter muscle – Жевательная мышца.
7. Auricular muscle – Ушная мышца.
8. Cervical part of rhomboid muscle – Шейная часть ромбовидной мышцы.
9. Slenius muscle – Пластыревидная мышца.
10. Cervical ventral serrate muscle – Шейная часть вентральной зубчатой мышцы.
11. Cervical part of trapezius muscle – Шейная часть трапециевидной мышцы.
12. Thoracic part of trapezius muscle – Грудная часть трапециевидной мышцы.
13. Latissimus dorsi muscle – Широчайшая мышца спины.
14. Sternomandibular muscle – Грудинонижнечелюстная мышца.
15. Cutaneous colli muscle – Кожная мышца.
16. Brachiocephalic muscle – Плечеголовная мышца.
17. Deltoid muscle – Дельтовидная мышца.
18. Cranial superficial pectoral muscle – Грудная поверхностная мышца.
19. Brachial triceps muscle – Трехглавая мышца плеча.
20. Brachial muscle – Внутренняя плечевая мышца.
21. Radial carpal extensor muscle and tendon – Лучевой разгибатель запястья.
22. Common digital extensor muscle and tendon – Общий разгибатель суставов пальца.
23. Lateral digital extensor muscle and tendon – Латеральный разгибатель пальца.
24. Lateral carpal flexor muscle and tendon – Локтевой разгибатель запястья.
25. Deep digital flexor muscle and tendon – Локтевая головка глубокого сгибателя запястья.
26. Thoracic ventral serrate muscle – Грудная часть зубчатой вентральной мышцы.
27. Caudal deep pectoral muscle – Глубокая грудная мышца.
28. External intercostals muscle – Наружная межреберная мышца.
29. External abdominal oblique muscle – Наружная косая мышца живота.
30. Tensor muscle of lateral femoral fascia – Напрягатель широкой фасции бедра.
31. Superficial gluteal muscle – Поверхностная ягодичная мышца.
32. Semitendinosus muscle – Полусухожильная мышца.
33. Short tail levator muscle – Подниматель хвоста.
34. Biceps femoris – Двуглавая мышца бедра.
35. Long difital extensor muscle and tendon – Длинный пальцевый разгибатель.
36. Lateral digital extensor muscle and tendon – Латеральный пальцевый разгибатель.
37. Deep digital flexor muscle and tendon – Длинный флексор 1 пальца.

FIGURE 24: SUPERFICIAL MUSCLES – Lateral View



Deep muscles part 1 – lateral overview and medial views of shoulder and hindquarter. Figure 25.

Глубокие мышцы лошади. Первый слой. Рисунок 25.

Рис 25 (а) латеральная сторона.

1. Levator muscle of nostril wing and upper lip – Подниматель крыла ноздри и верхней губы.
2. Sphincter muscle of mouth – Круговая мышца рта.
3. Zygomatic muscle – Скуловая мышца.
4. Depressor muscle of lower lip – Опускающий нижнюю губу.
5. Superficial component of masseter muscle – Поверхностный компонент жевательной мышцы.
6. Temporal muscle – Височная мышца.
7. Splenius muscle – Пластыревидная мышца.
8. Sternomandibular muscle – Грудно-нижнечелюстная мышца.
9. Omohyoid muscle – Плечеподъязычная мышца.
10. Rhomboid muscle – Ромбовидная мышца.
11. Subclavius muscle – Подключичная мышца.
12. Supraspinous muscle – Предостная мышца.
13. Infraspinous muscle – Заостная мышца.
14. Deltoid muscle – Дельтовидная мышца.
15. Triceps muscle – Трехглавая мышца.
16. Cranial dorsal serrate muscle – Краниальная дорсальная зубчатая.
17. Caudal dorsal serrate muscle – Каудальная дорсальная зубчатая.
18. Thoracic part of ventral serrate m. – Грудная ч. Вентр. зубчатой м.
19. Middle gluteal muscle – Средняя ягодичная мышца.
20. Deep gluteal muscle – Глубокая ягодичная мышца.
21. Semitendinosus muscle – Полусухожильная мышца.
22. Tendon of internal obturator m. – Сухожилие внутр запирательной
23. Quadratus femoris muscle – Квадратная мышца бедра.
24. Semimembranosus muscle – Полуперепончатая мышца.
25. Adductor muscle – Приводящая мышца.
26. Lateral head of gastrocnemius m – Латер. головка икроножной м.
27. Rectus femoris muscle – Боковой разгибатель пальцев.
28. Lateral vastus muscle – Латеральная головка.
29. Popliteal muscle – Подколенная мышца.
30. Deep digital flexor m – Глубокий сгибатель пальцев.
31. Cranial tibial muscle – Краниальная большеберцовая мышца.
32. Radial carpal extensor muscle – Лучевой разгибатель запястья.
33. Radial carpal Flexor muscle – Лучевой сгибатель запястья.

34. Ulnar carpal Flexor muscle – Локтевой сгибатель запястья.

Рис 25 (b) Мышцы грудной конечности – медиальная поверхность.

1. Scapular cartilage – Лопаточный хрящ.
2. Serrated face of scapula – Зубчатая часть лопатки.
3. Subclavius muscle – Подключичная мышца.
4. Supraspinous muscle – Предостная мышца.
5. Latissimus dorsal muscle – Широчайшая мышца спины.
6. Teres major muscle – Большая круглая мышца.
7. Coracobrachial muscle – Корокоидно-плечевая мышца.
8. Triceps muscle – Трехглавая мышца.
9. Tensor muscle of antebrachial fascia – Напрягатель широкой фасции предплечья.
10. Biceps brachii muscle – Двуглавая мышца плеча.
11. Deep digital flexor muscle – Глубокий сгибатель пальцев.
12. Lacertus fibrosus – Глубокий сгибатель пальцев.
13. Brachial muscle – Внутренняя плечевая мышца.
14. Radial carpal extensor muscle – Лучевой разгибатель запястья.
15. Ulnar carpal Flexor muscle – Локтевой сгибатель запястья.
16. Radial carpal Flexor muscle – Лучевой сгибатель запястья.

Рис 25(с) Мышцы тазовой конечности – медиальная поверхность.

1. Psoas minor m. – Малая поясничная мышца.
2. Psoas major muscle – Большая поясничная мышца.
3. Iliacus componen of iliopsoas muscle – Подвздошная мышца.
4. Tensor muscle of lateral fascia of thigh – Напрягатель широкой фасции бедра.
5. Pectineus muscle – Гребешковая мышца.
6. Sartorius muscle – Портняжная мышца.
7. Medial vastus muscle – Медиальная головка.
8. Gracialis muscle – Стройная мышца.
9. Tail depressor muscle – Опускающий хвоста.
10. Coccygeal muscle – Хвостовая мышца.
11. Lavator ani muscle – Подниматель ануса.
12. Semimembranosus muscle – Полуперепончатая мышца.
13. Semitendinosus muscle – Полусухожильная мышца.
14. Internal obturator muscle – Внутренняя запирающая мышца.
15. Medial head of gastrocnemius muscle – Медиальная головка икроножной мышцы.
16. Symphyseal tendon – Сухожилие симфиза.

FIGURE 25: DEEP MUSCLES PART I – Lateral Overview and Medial Views of Shoulder and Hindquarter

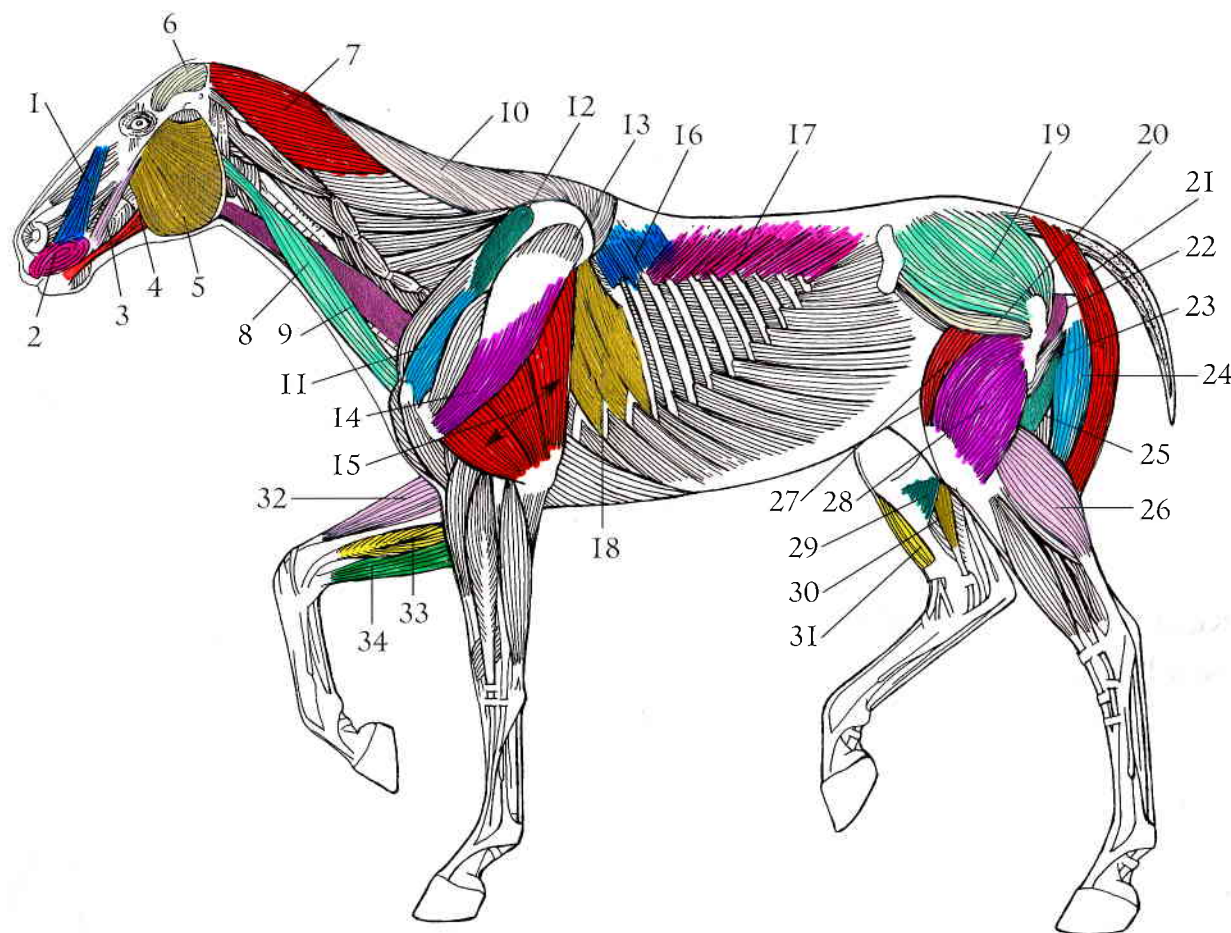


Fig. 25(a) Lateral overview

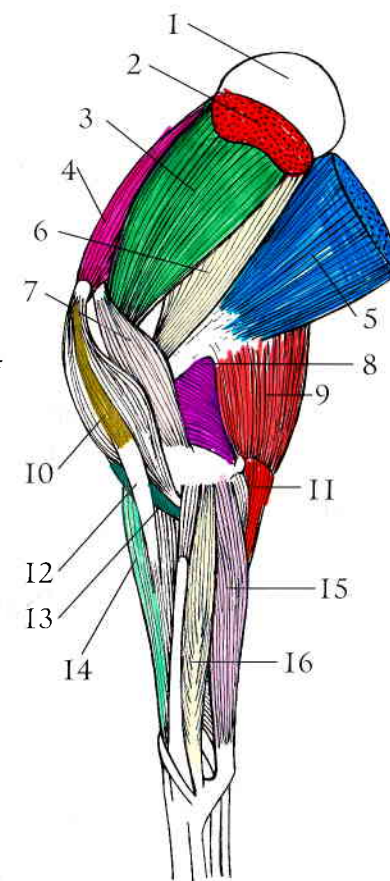


Fig. 25(b) Right shoulder and forearm (removed from body) – medial view

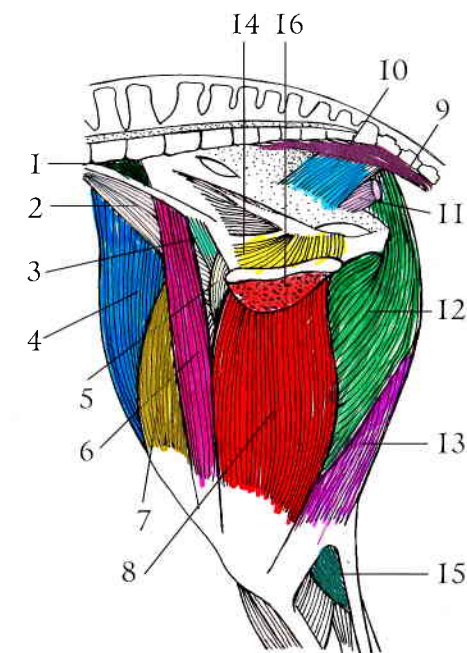


Fig. 25(c) Hindquarter – medial view

DEEP MUSCLES PART 2 – Lateral View without Left Shoulder, Dissections of Shoulder and Medial View of Hindquarter (Figure 26)

Fig. 26(a) Lateral View without Left Shoulder

Identify and colour:

- ① Levator muscle of upper lip
- ② Levator muscle of upper lip and nostril wing
- ③ Transverse nasal muscle
- ④ Sphincter muscle of mouth
- ⑤ Buccinator muscle (buccal part)
- ⑥ Depressor muscle of lower lip
- ⑦ Buccinator muscle (molar part)
- ⑧ Temporal muscle
- ⑨ Occipitomandibular part of digastric muscle
- ⑩ Splenius muscle
- ⑪ Thyropharyngeal muscle ✓
- ⑫ Cricopharyngeal muscle
- ⑬ Sternohyoid and sternothyroid muscle
- ⑭ Longus capitis and longus colli muscles
- ⑮ Omohyoid muscle
- ⑯ Trachea
- ⑰ Cervical intertransverse muscles
- ⑱ Scalene muscle
- ⑲ Cervical rhomboid muscle
- ⑳ Thoracic rhomboid muscle
- ㉑ Subclavius muscle

- ㉒ Rectus thoracis muscle
- ㉓ Descending superficial pectoral muscle
- ㉔ Caudal deep pectoral muscle
- ㉕ Transverse superficial pectoral muscle
- ㉖ Thoracic ventral serrate muscle
- ㉗ Cranial dorsal serrate muscle
- ㉘ External intercostal muscles
- ㉙ External abdominal oblique muscles
- ㉚ Caudal dorsal serrate muscle
- ㉛ Iliopsoas muscle
- ㉜ Deep gluteal muscle
- ㉝ Coccygeus muscle
- ㉞ Internal obturator muscle and tendon
- ㉟ Lateral vastus muscle
- ㊱ Quadratus femoris muscle
- ㊲ Tail levator, flexor and depressor muscles
- ㊳ Lateral head of gastrocnemius muscle
- ㊴ Soleus muscle
- ㊵ Cranial tibial muscle
- ㊶ Long digital extensor muscle
- ㊷ Lateral digital extensor muscle
- ㊸ Deep digital flexor muscle
- ㊹ Ulnar carpal flexor muscle
- ㊺ Radial carpal extensor muscle
- ㊻ Radial carpal flexor muscle

Figs. 26(b) Muscles of Left Shoulder and Upper Limb and (c) Further Dissection

Identify and colour:

- ① Supraspinous muscle

- ② Infraspinous muscle
- ③ Long head of triceps muscle
- ④ Biceps brachii muscle
- ⑤ Brachial muscle
- ⑥ Teres major muscle
- ⑦ Medial head of triceps muscle
- ⑧ Deep digital flexor muscle
- ⑨ Lateral ulnar muscle
- ⑩ Radial carpal extensor muscle
- ⑪ Common digital extensor muscle
- ⑫ Lateral digital extensor muscle
- ⑬ Anconeal muscle

Fig. 26(d) Hindquarter – Medial View

Identify and colour:

- ① Psoas minor muscle
- ② Psoas major muscle
- ③ Iliacus muscle
- ④ Internal obturator muscle and tendon
- ⑤ Rectus femoris muscle
- ⑥ Pectineus muscle
- ⑦ Medial vastus muscle
- ⑧ Adductor muscle
- ⑨ Tail depressor muscle
- ⑩ Coccygeus muscle
- ⑪ Levator ani muscle
- ⑫ Semimembranosus muscle
- ⑬ Semitendinosus muscle
- ⑭ Popliteal muscle
- ⑮ Sacrosciatic muscle

FIGURE 26 DEEP MUSCLES PART 2 – Lateral View without Left Shoulder, Dissections of Shoulder and Medial View of Hindquarter

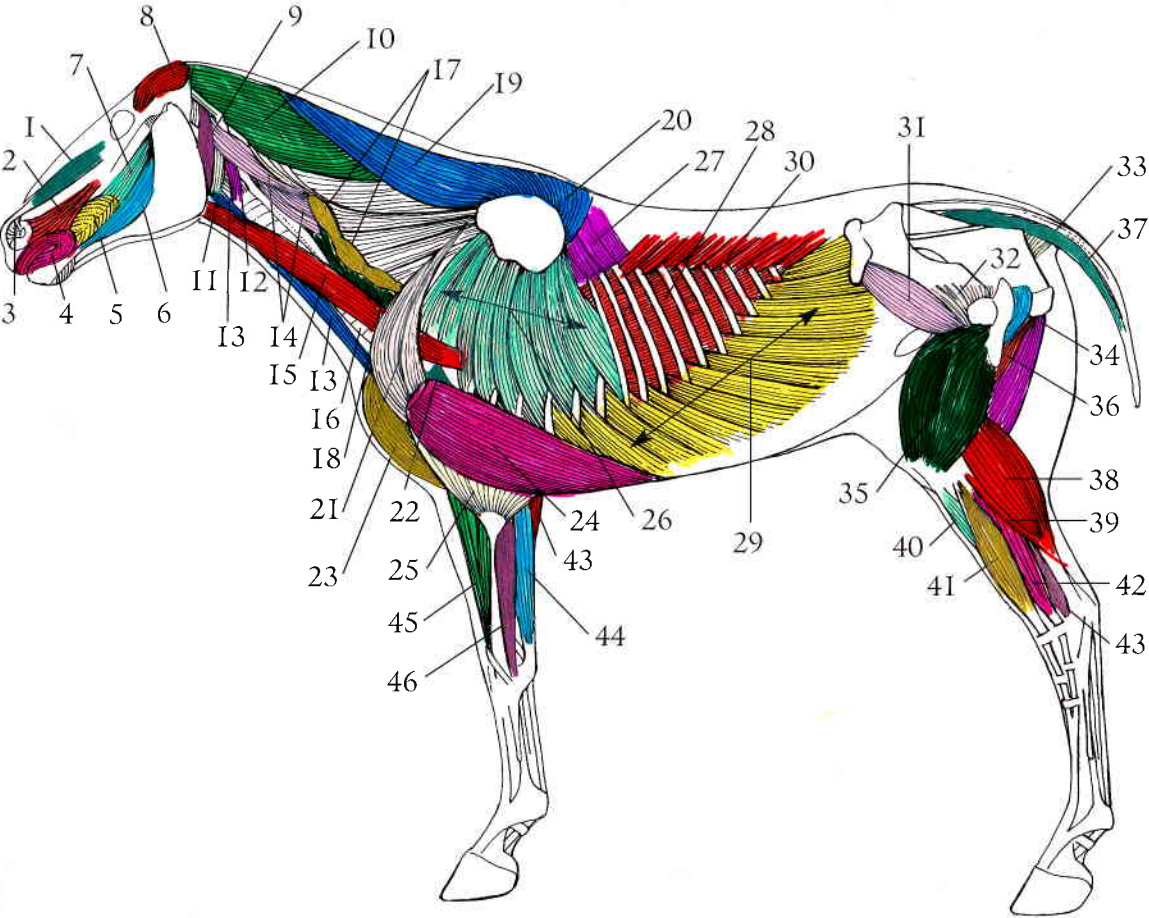


Fig. 26(a) Lateral view without left shoulder (removed)

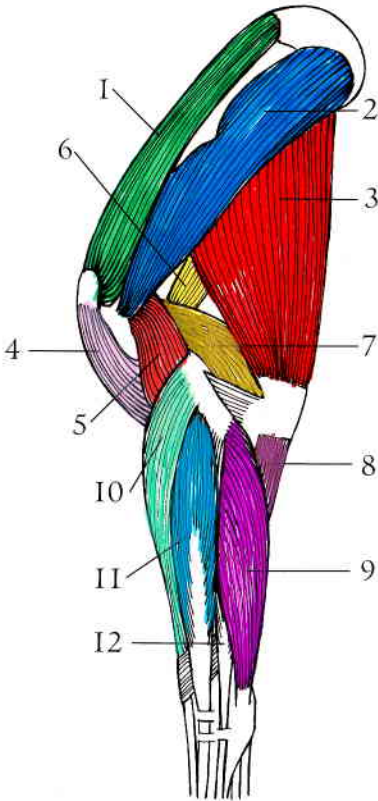


Fig. 26(b) Muscles of left shoulder and upper limb

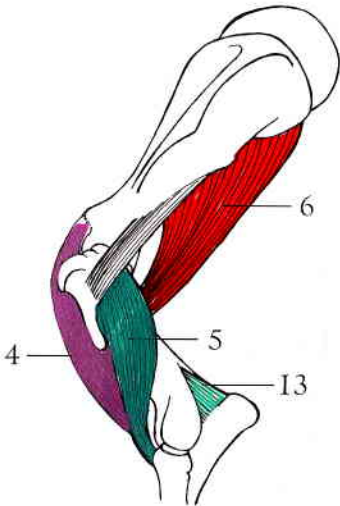


Fig. 26(c) Further dissection of left shoulder

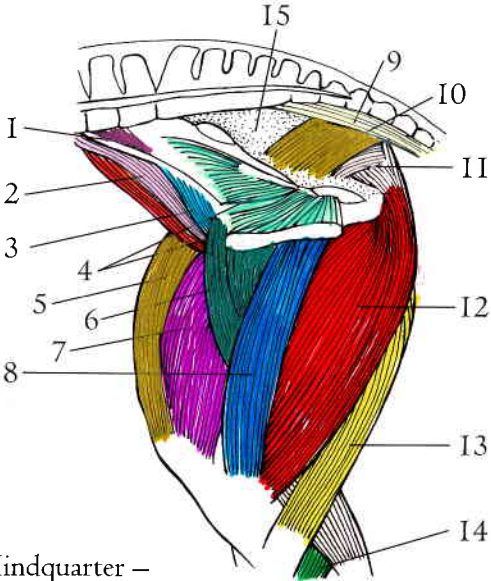


Fig. 26(d) Hindquarter – medial view

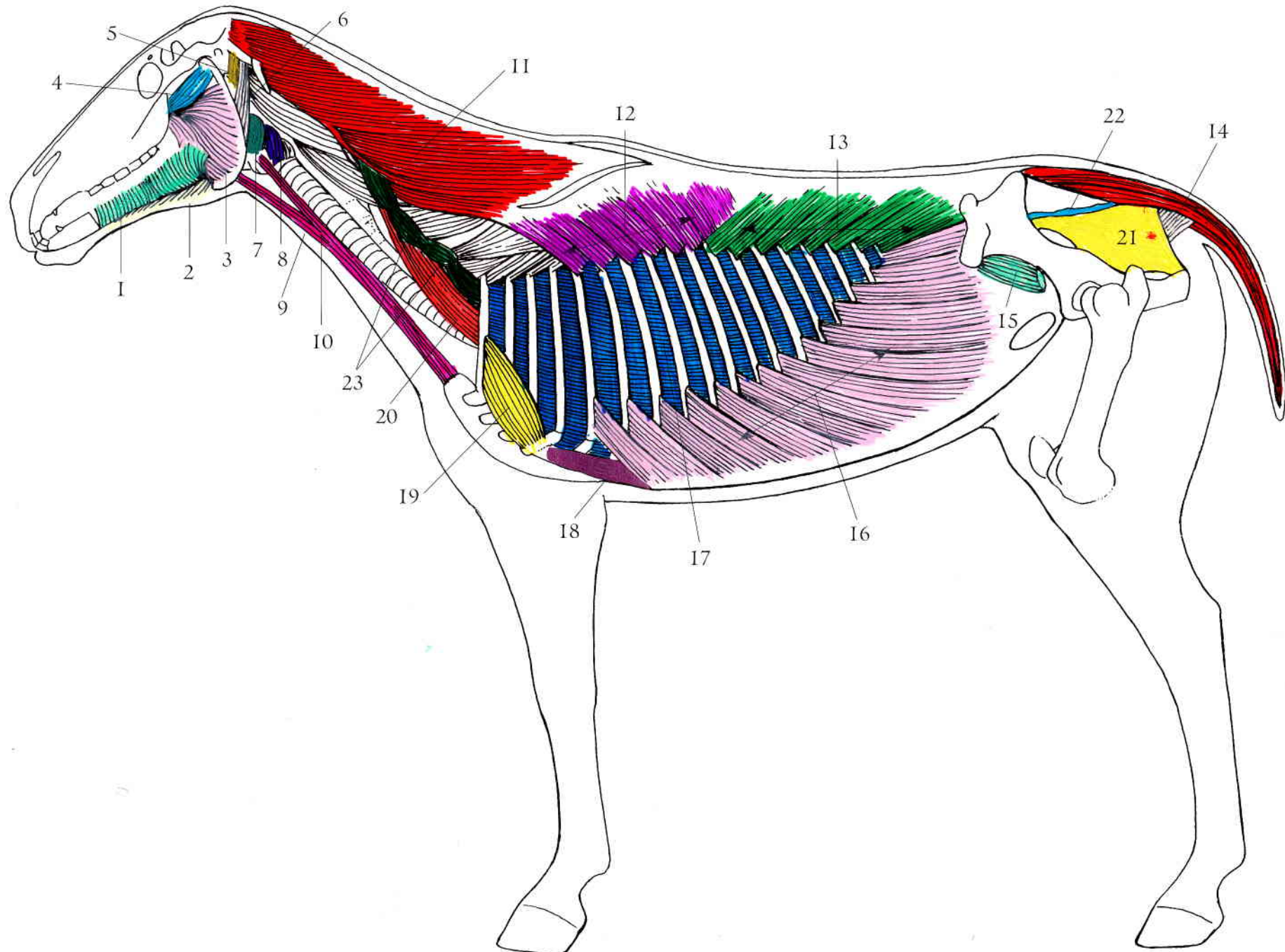
Deep muscles part 3 – figure 27.

Глубокие мышцы лошади. Третий слой.

Рисунок 27.

1. Mylohyoid muscle – Подъязычно-межчелюстная мышца.
2. Digastric muscle – Затылочно-нижнечелюстная мышца.
3. Medial pterygoid muscle – Медиальная крыловая мышца.
4. Lateral pterygoid muscle – Латеральная крыловая мышца.
5. Occipitohyoid muscle – Затылочно-подъязычная мышца.
6. Occipitomandibular muscle – Затылочно-нижнечелюстная мышца.
7. Thyropharyngeal muscle – Щитовидно-глоточная мышца.
8. Cricoharyngeal muscle – Крыловидно-глоточная мышца.
9. Sternohyoid muscle – Грудино-подъязычная мышца.
10. Sternothyroid muscle – Грудино-щитовидная мышца.
11. Splenius muscle – Пластыревидная мышца.
12. Cranial dorsal serrate muscle – Краниальная дорсальная зубчатая мышца.
13. Caudal dorsal serrate muscle – Каудальная дорсальная зубчатая мышца.
14. Coccygeus muscle – Хвостовая мышца.
15. Iliopsoas muscle – Подвздошно-поясничная мышца.
16. External abdominal oblique muscle – Наружная косая мышца живота.
17. External intercostal muscle – Наружные межреберные мышцы.
18. Rectus abdominis muscle – Прямая мышца живота.
19. Rectus thoracis muscle – Прямая мышца груди.
20. Scalene muscle – Лестничная мышца.
21. Sacrospinous ligament – Крестцово-седалищная связка.
22. Lateral sacral crest – Латеральный крестцовый гребень.
23. Cervical intertransverse muscle – Шейные межпоперечные мышцы.

FIGURE 27: DEEP MUSCLES PART 3 – Axial Musculature in Lateral View (I)



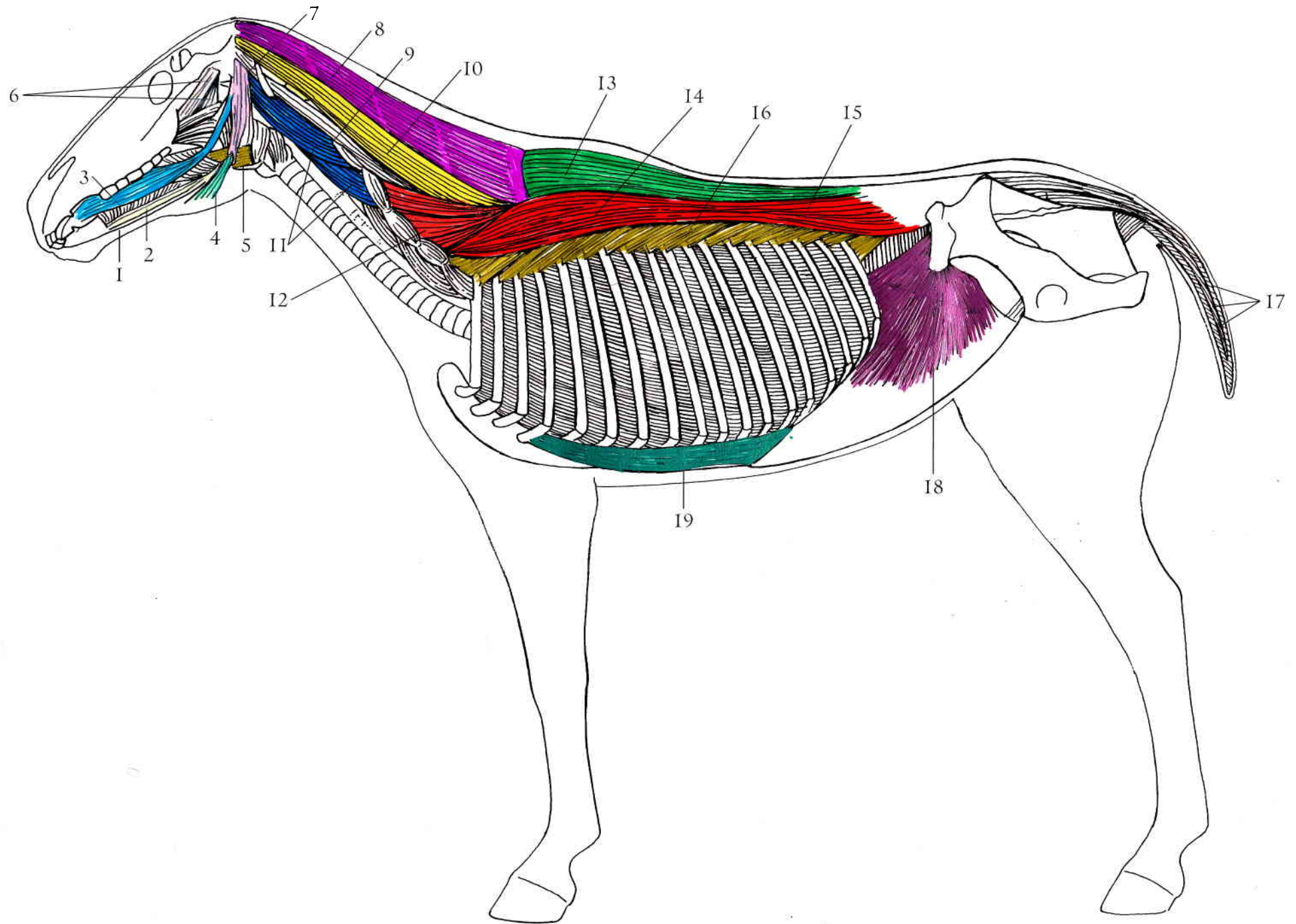
Deep muscles part 4 – figure 28.

Глубокие мышцы лошади. Четвертый слой.

Рисунок 28.

1. Geniohyoid muscle – Подбородочно-подъязычная мышца.
2. Genioglossal muscle – Подъязычно-глоточная мышца.
3. Styloglossal muscle – Язычная боковая мышца.
4. Digastric muscle – Двубрюшная мышца.
5. Thyrohyoid muscle – Щитовидно-подъязычная мышца.
6. Palatine muscle – Небная мышца.
7. Cranial and caudal capital oblique muscles – Краниальная и каудальная косые мышцы головы.
8. Capital spinal muscle – Остистая мышца головы.
9. Atlantal longissimus muscle – Длиннейшая мышца атланта.
10. Capital longissimus muscle – Длиннейшая мышца головы.
11. Longus capitis and longus colli muscle – Мышцы длинная головы и длинная шеи.
12. Cervical longissimus muscle – Длиннейшая мышца шеи.
13. Thoracic and cervical spinal muscle – Грудная и шейная остистая мышца.
14. Thoracic longissimus muscle – Длиннейшая мышца груди.
15. Lumbar longissimus muscle – Длиннейшая мышца поясницы.
16. Iliocostal muscle – Подвздошно-реберная мышца.
17. Tail muscle – Мышцы хвоста.
18. Internal abdominal oblique muscle – Поверхностное паховое кольцо.
19. Rectum abdominis muscle – Прямая мышца живота.

FIGURE 28: DEEP MUSCLES PART 4 – Axial Musculature in Lateral View (2)



MUSCLES – Dorsal and Ventral Views (Figure 29)

Fig. 29(a) Superficial and Deep Muscles – Dorsal View

Label:

- A Lumbodorsal fascia
- B Gluteal fascia

Identify and colour:

- ① Scutularis muscle
- ② Auricular levator muscle
- ③ Auricular abductor muscle
- ④ Splenius muscle
- ⑤ Complexus muscle
- ⑥ Cervical part of ventral serrate muscle
- ⑦ Brachiocephalic muscle
- ⑧ Rhomboid muscle
- ⑨ Cervical part of trapezius muscle
- ⑩ Supraspinous muscle
- ⑪ Infraspinous muscle
- ⑫ Triceps muscle
- ⑬ Deltoid muscle
- ⑭ Thoracic part of trapezius muscle
- ⑮ Thoracic part of ventral serrate muscle
- ⑯ Spinalis dorsi
- ⑰ Latissimus dorsi muscle
- ⑱ External intercostal muscle
- ⑲ Longissimus dorsi muscle

- ⑳ Iliocostal muscle
- ㉑ Caudal part of dorsal serrate muscle
- ㉒ Costal retractor muscle
- ㉓ Transverse abdominal muscle
- ㉔ Internal abdominal oblique muscle
- ㉕ External abdominal oblique muscle
- ㉖ Medial gluteal muscle
- ㉗ Superficial gluteal muscle
- ㉘ Biceps femoris muscle
- ㉙ Semitendinosus muscle
- ㉚ Tail levator muscle

- ⑯ Semimembranosus muscle
- ⑰ Semitendinosus muscle
- ⑱ Adductor muscle

Fig. 29(b) Muscles – Ventral View

Identify and colour:

- ① Omohyoid muscle
- ② Sternohyoid muscle
- ③ Sternomandibular part of sternocephalic muscle
- ④ Brachiocephalic muscle
- ⑤ Cervical subcutaneous muscle
- ⑥ Cranial superficial pectoral muscle
- ⑦ Caudal superficial pectoral muscle
- ⑧ Caudal deep pectoral muscle
- ⑨ Ventral serrate muscle
- ⑩ External abdominal oblique muscle
- ⑪ Abdominal subcutaneous muscle
- ⑫ Femoral quadriceps muscle
- ⑬ Sartorius muscle
- ⑭ Iliopsoas muscle
- ⑮ Gracilis muscle

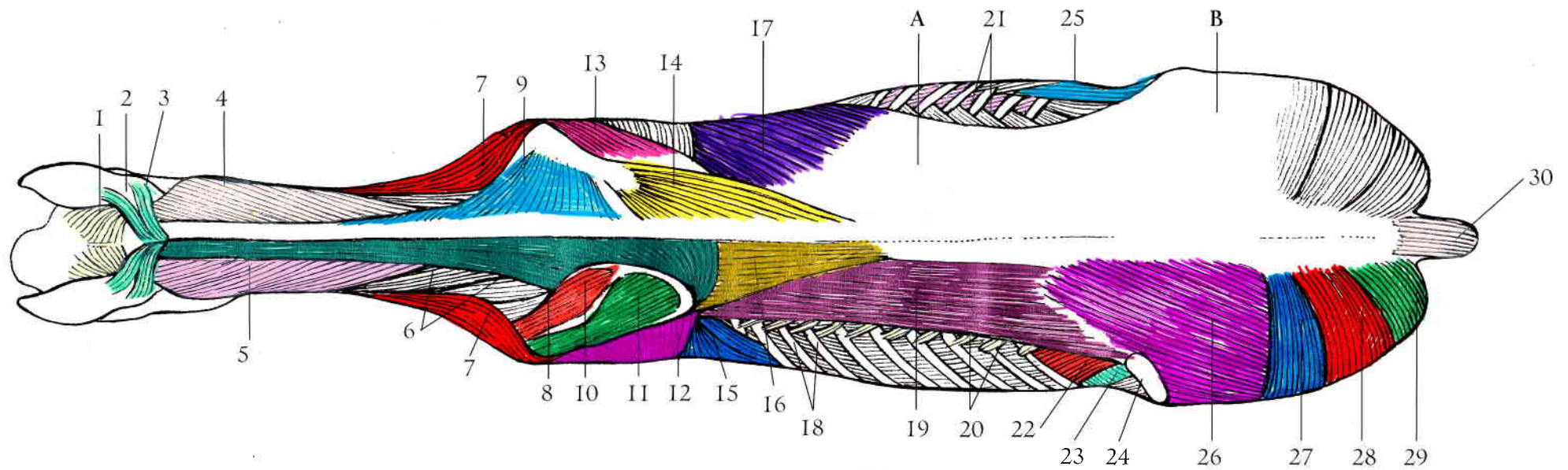


Fig. 29(a) Superficial and deep muscles – dorsal view

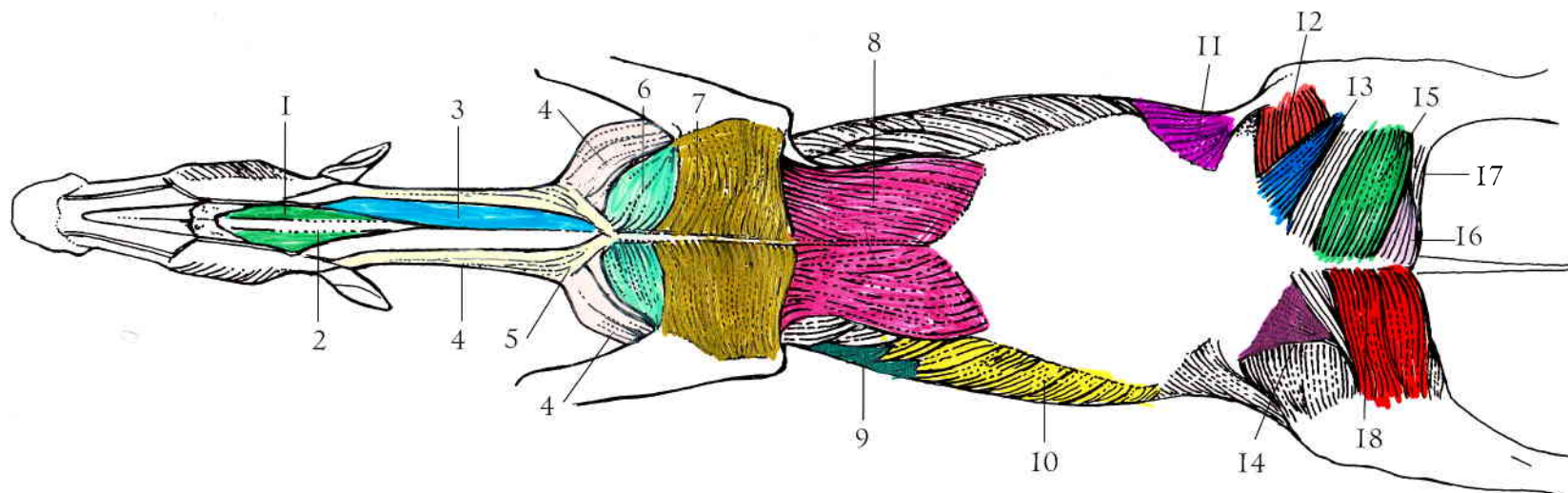


Fig. 29(b) Muscles – ventral view

MUSCLES – Cranial and Caudal Views (Figure 30)

Fig. 30(a) Cranial View

Identify and colour:

- ① Interscutular muscle
- ② Levator muscle of upper lip and nostril wing
- ③ Levator muscle of upper lip
- ④ Masseter muscle
- ⑤ Transverse nasal muscle
- ⑥ Sternothyrohyoid muscle
- ⑦ Sternomandibular part of sternocephalic muscle
- ⑧ Brachiocephalic muscle
- ⑨ Remains of skin muscle in neck (cutaneous colli)
- ⑩ Cranial superficial pectoral muscle
- ⑪ Cervical part of trapezius muscle
- ⑫ Cranial deep pectoral muscle
- ⑬ Supraspinatus muscle
- ⑭ Long head of triceps muscle
- ⑮ Lateral head of triceps muscle
- ⑯ Brachialis muscle
- ⑰ Caudal superficial pectoral muscle
- ⑱ Radial carpal extensor muscle
- ⑲ Oblique carpal extensor muscle and tendon

Fig. 30(b) Superficial Muscles – Caudal View

Identify and colour:

- | | |
|-----------------------------------|--|
| ① Levator muscle of tail | |
| ② Superficial gluteal muscle | |
| ③ Biceps femoris muscle | } components of
hamstring group
of muscles |
| ④ Semitendinosus muscle | |
| ⑤ Semimembranosus muscle | |
| ⑥ Gracilis muscle | |
| ⑦ Gastrocnemius muscle | |
| ⑧ Soleus muscle | |
| ⑨ Deep digital flexor muscle | |
| ⑩ Lateral digital extensor muscle | |

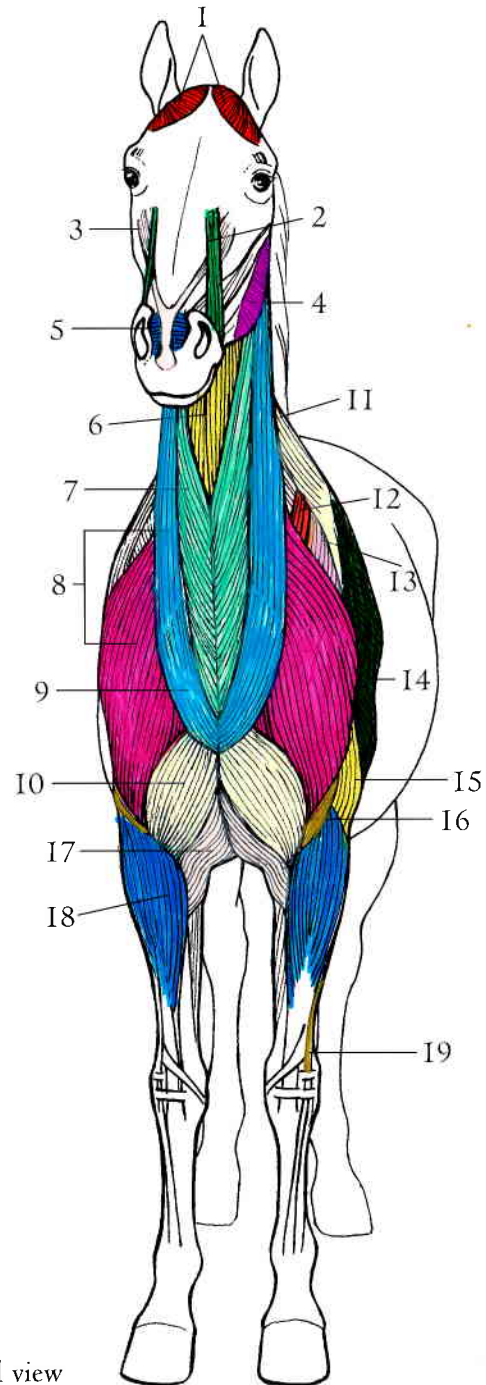


Fig. 30(a) Cranial view

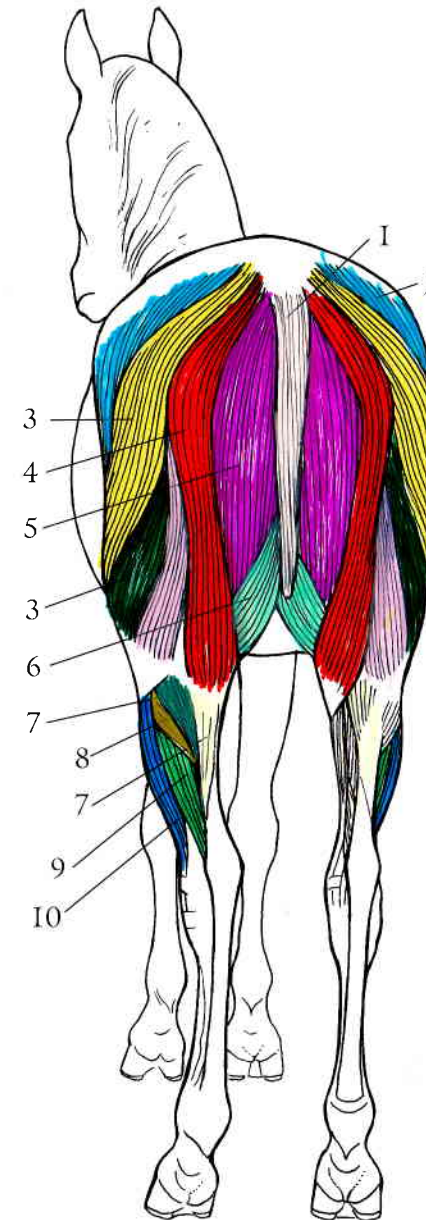


Fig. 30(b) Superficial muscles – caudal view

Tendons and tendon sheaths of the forelimb – lateral and medial views and axial section of digit – figure 31.

Сухожилия и сухожильные влагалища кисти – латеральная и медиальная стороны и осевое сечение пальца.

1. Radial carpal extensor muscle; 1a tendons sheath; 1b tendon – Лучевой разгибатель запястья; сухожильное влагалище; сухожилие.
2. Common digital extensor muscle; 2a tendons sheath; 2b tendon – Общий разгибатель пальцев; сухожильное влагалище; сухожилие.
3. Lateral digital extensor muscle; 3a tendons sheath; 3b tendon – Боковой разгибатель пальцев; сухожильное влагалище; сухожилие.
4. Deep digital flexor muscle; 4a carpal synovial sheath; 4b tendon; 4c subcarpal check ligament; 4d digital synovial sheath – Глубокий сгибатель пальцев; запястное синовиальное влагалище; сухожилие; запястно-пястная связка; пальцевое синовиальное влагалище.
5. Lateral ulnar muscle; 5a tendons sheath; 5b long tendon – Локтевой разгибатель запястья; сухожильное влагалище; сухожилие.
6. Ulnar carpal flexor muscle; 6a tendon – Локтевой сгибатель запястья; сухожилие.
7. Radial carpal flexor muscle; 7a tendons sheath; 7b tendon – Лучевой сгибатель запястья; сухожильное влагалище; сухожилие.
8. Tendon of superficial digital flexor muscle – Сухожилие поверхностного сгибателя пальца.
9. Palmarolateral pouch of antebrachiocarpal joint capsule – Пальмарно-латеральное выпячивание капсулы предплечно-запястного сустава.
10. Proximal extension of fetlock joint capsule – Проксимальное расширение капсулы путового сустава.
11. Synovial bursa under common digital extensor tendon – Синовиальная бурса под сухожилием общего разгибателя пальцев.
12. Palmar annular ligament of fetlock joint – Пальмарная кольцевая связка путового сустава.
13. Proximal digital annular ligament – Проксимальная пальцевая кольцевая связка.
14. Suspensory band from 1st phalanx to lateral cartilage of 3rd phalanx – Подвешивающая полоска от первой фаланги к латеральному хрящу третьей фаланги.
15. Suspensory ligament of navicular bone – Подвешивающая связка челночной кости.
16. Suspensory ligament – Подвешивающая связка.
17. Distal digital annular ligament – Дистальная пальцевая кольцевая связка.
18. Navicular synovial bursa – Челночная синовиальная бурса.
19. Distal navicular ligament – Дистальная челночная связка.
20. Fetlock joint capsule – Капсула путового сустава.
21. Pastern joint capsule – Капсула венечного сустава.
22. Coffin joint capsule – Капсула копытного сустава.
23. Distal sesamoidean ligament – Дистальная сезамовидная связка.

FIGURE 31: TENDONS AND TENDON SHEATHS OF THE FORELIMB – Lateral and Medial Views and Axial Section of Digit

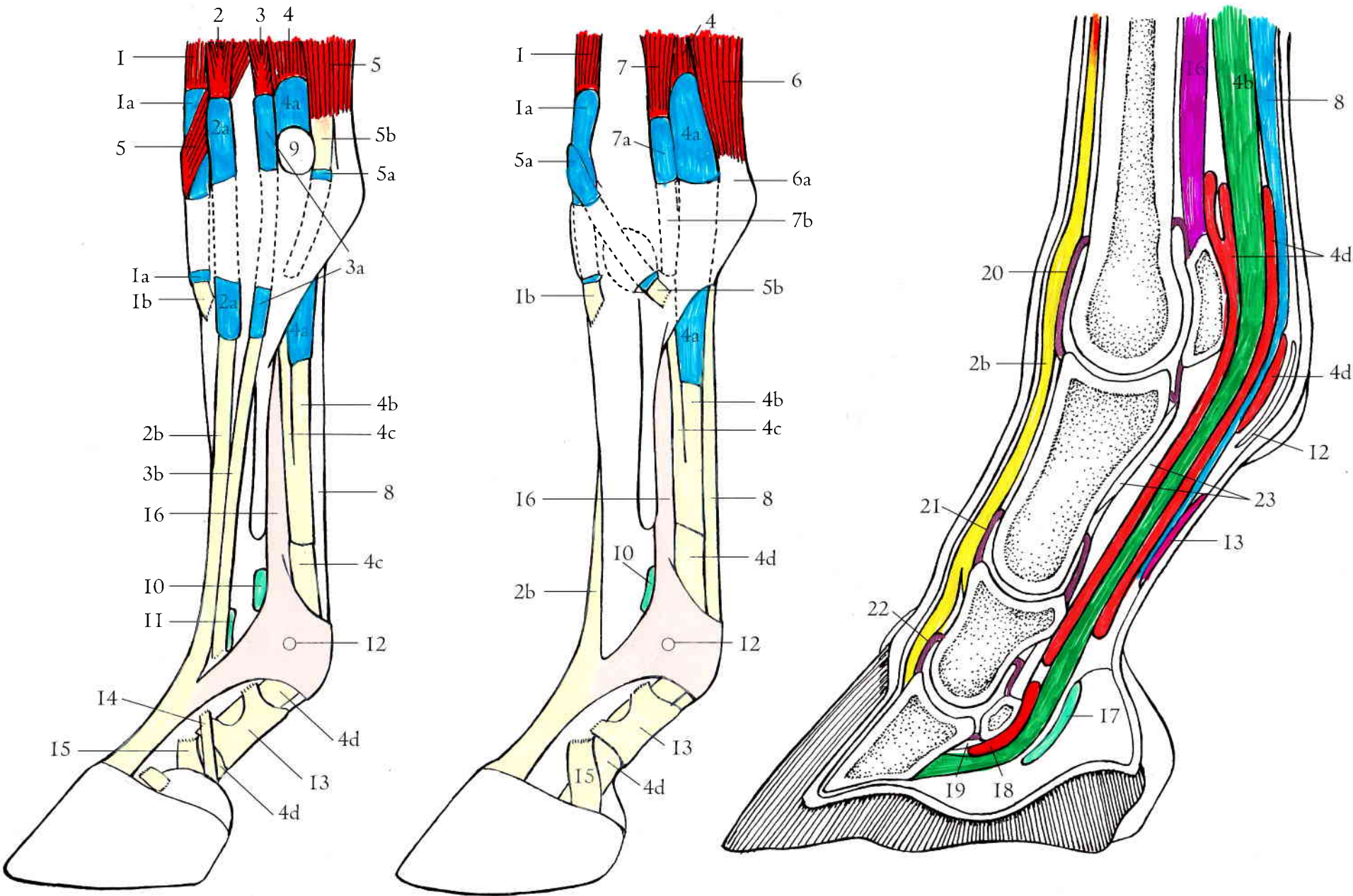


Fig. 31(a) Lateral view

Fig. 31(b) Medial view

Fig. 31(c) Axial section of digit

TENDONS AND TENDON SHEATHS OF THE HOCK – Lateral and Medial Views

(Figure 32)

Identify and colour the following, using the same colour for all parts of each structure, on one or both of the drawings as appropriate.

- ① Long digital extensor muscle; ①a tendon sheath;
①b tendon
- ② Lateral digital extensor muscle; ②a tendon sheath;
②b tendon
- ③ Deep digital flexor muscle (lateral head); ③a tendon
sheath; ③b tendon; ③c tarsal synovial sheath
- ④ Deep digital flexor muscle (medial head);
④a tendon sheath
- ⑤ Achilles' tendon
- ⑥ Tendon of superficial digital flexor
- ⑦ Cranial tibial muscle; ⑦a tendon sheath;
⑦b medial tendon; ⑦c dorsal tendon
- ⑧ Tendon of peroneus tertius
- ⑨ Lateroplantar pouch
- ⑩ Mediolplantar pouch
- ⑪ Dorsal pouch
- ⑫ Synovial bursa under median tendon of cranial
tibial muscle
- ⑬ Suspensory ligament
- ⑭ Synovial bursa under superficial digital flexor
tendon (where tendon crosses point of hock joint)

FIGURE 32: TENDONS AND TENDON SHEATHS OF THE HOCK –
Lateral and Medial Views

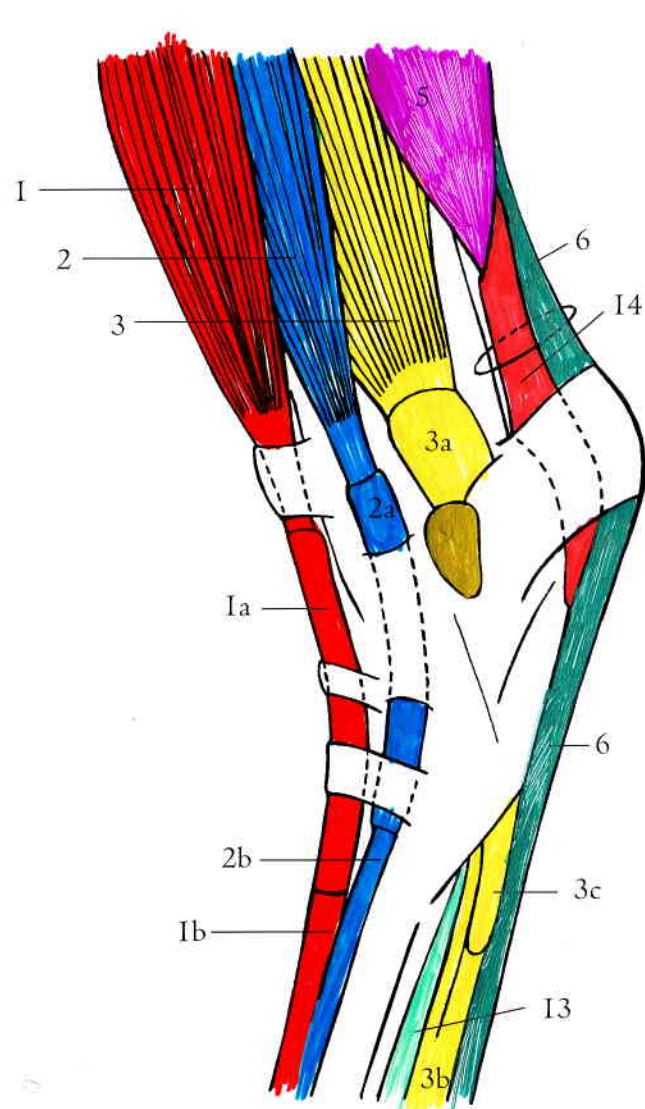


Fig. 32(a) Lateral view

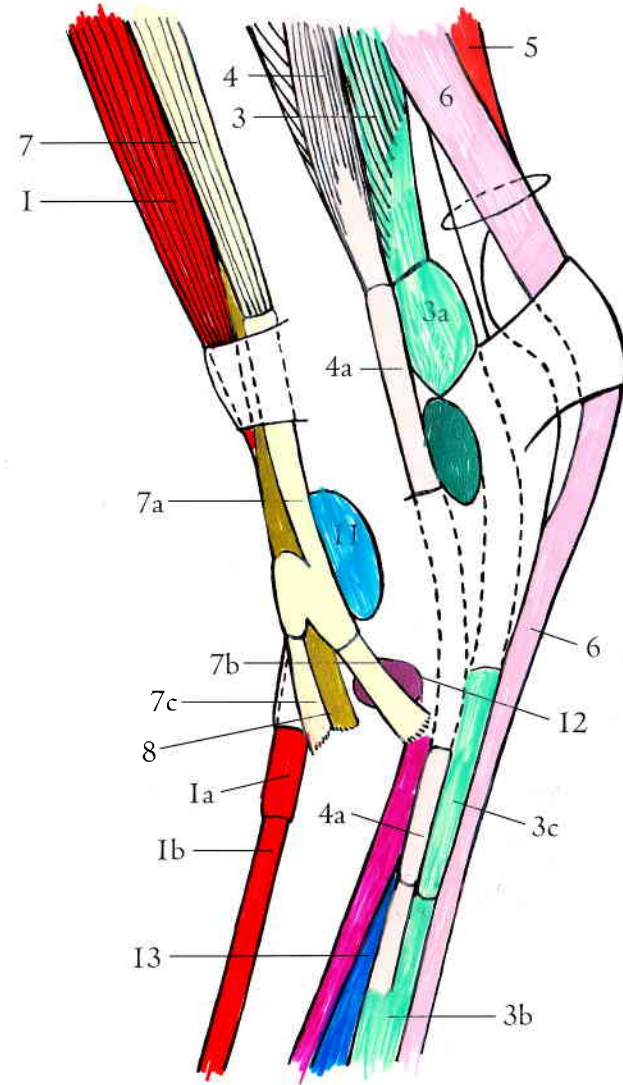


Fig. 32(b) Medial view

THE STAY APPARATUS – Lateral View (Figure 33)

Identify the following and colour-match the numbered circles with those on the drawing (i.e. colour the numbered circles on the drawing the same as their corresponding number in the text).

- ① Cervical part of rhomboid muscle
- ② Cervical part of ventral serrate muscle
- ③ Thoracic part of ventral serrate muscle
- ④ Supraspinatus muscle
- ⑤ Biceps brachii muscle
- ⑥ Long head of triceps muscle
- ⑦ Lateral head of triceps muscle
- ⑧ Medial head of triceps muscle
- ⑨ Lacertus fibrosus
- ⑩ Radial carpal extensor muscle
- ⑪ Conjoint tendon of radial carpal extensor muscle and lacertus fibrosus
- ⑫ Superficial digital flexor muscle
- ⑬ Tendon of superficial digital flexor muscle
- ⑭ Radial check ligament
- ⑮ Deep digital flexor muscle
- ⑯ Tendon of deep digital flexor muscle
- ⑰ Carpal check ligament
- ⑱ Suspensory ligament
- ⑲ Distal sesamoidean ligament
- ⑳ Tendon of common digital extensor muscle
- ㉑ Extensor branch of suspensory ligament attaching

to common digital extensor tendon

- ㉒ Gluteal muscles
- ㉓ Tensor muscle of lateral fascia of thigh
- ㉔ Rectus femoris muscle
- ㉕ Vastus muscles
- ㉖ Biceps femoris
- ㉗ Semitendinosus muscle
- ㉘ Accessory or tarsal tendon from the biceps femoris and semitendinosus muscles
- ㉙ Straight patellar ligaments
- ㉚ Peroneus tertius muscle
- ㉛ Gastrocnemius muscle
- ㉜ Tarsal check ligament

FIGURE 33: THE STAY APPARATUS – Lateral View

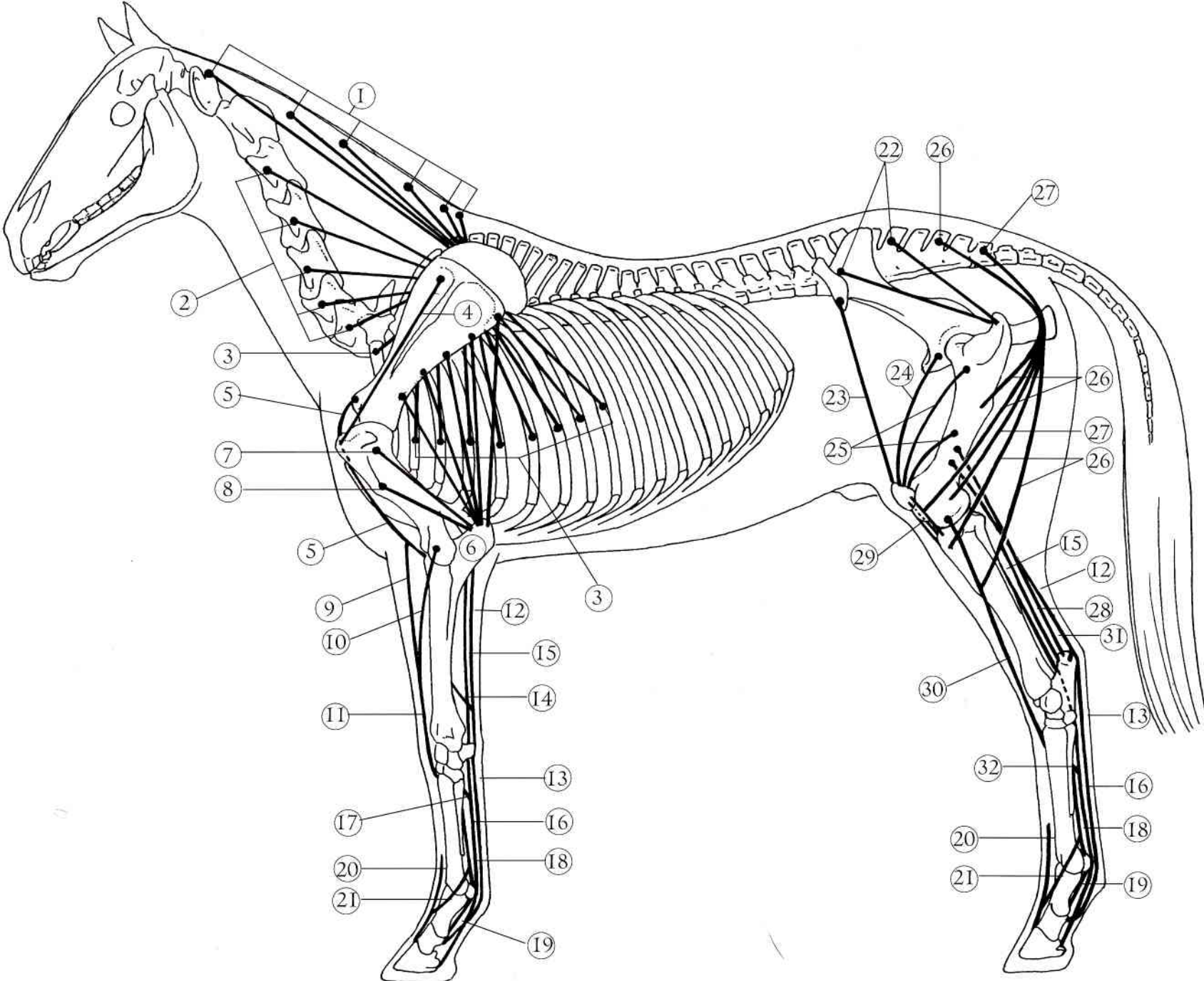
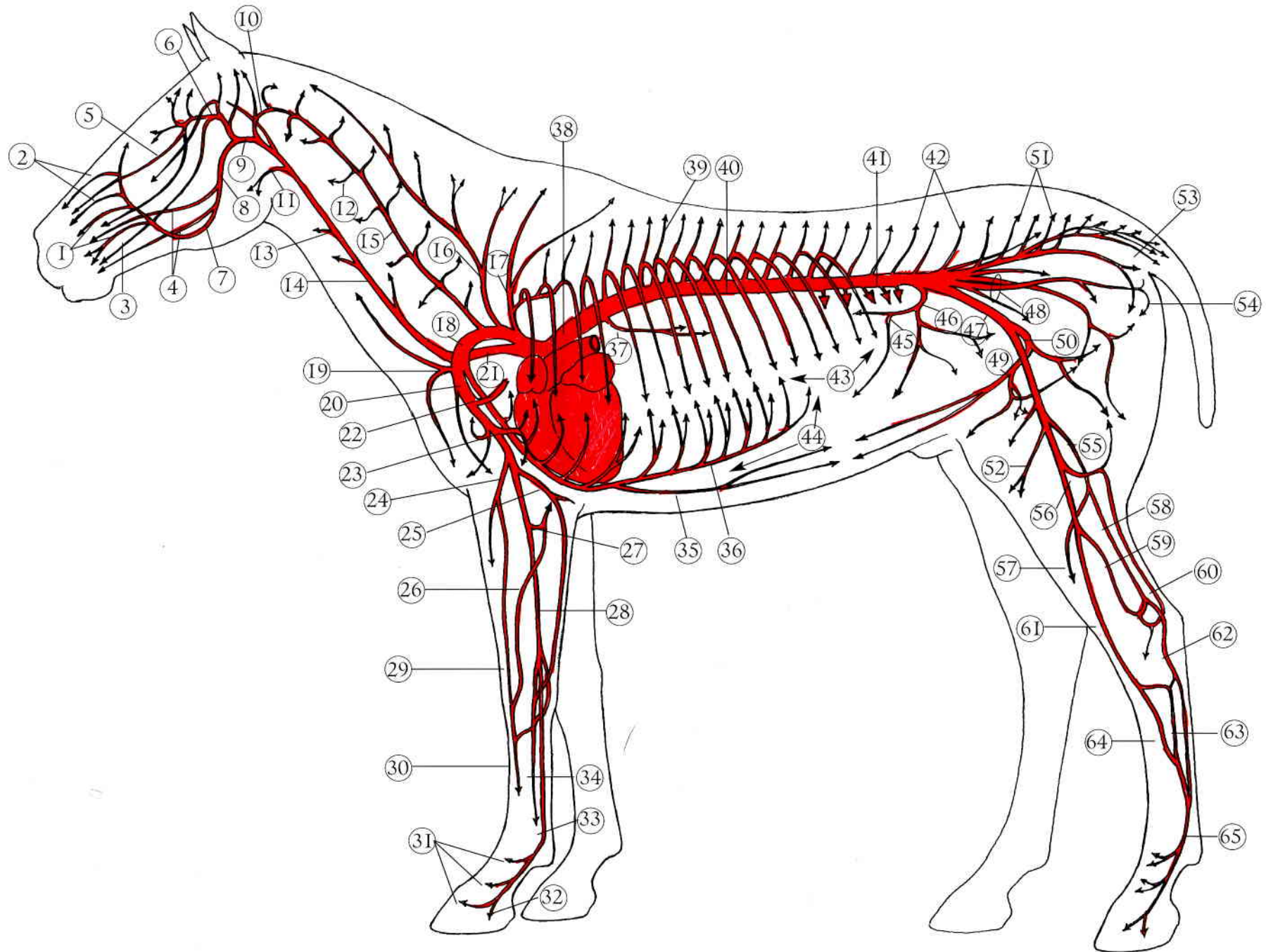


FIGURE 34: MAJOR ARTERIES – Lateral Overview



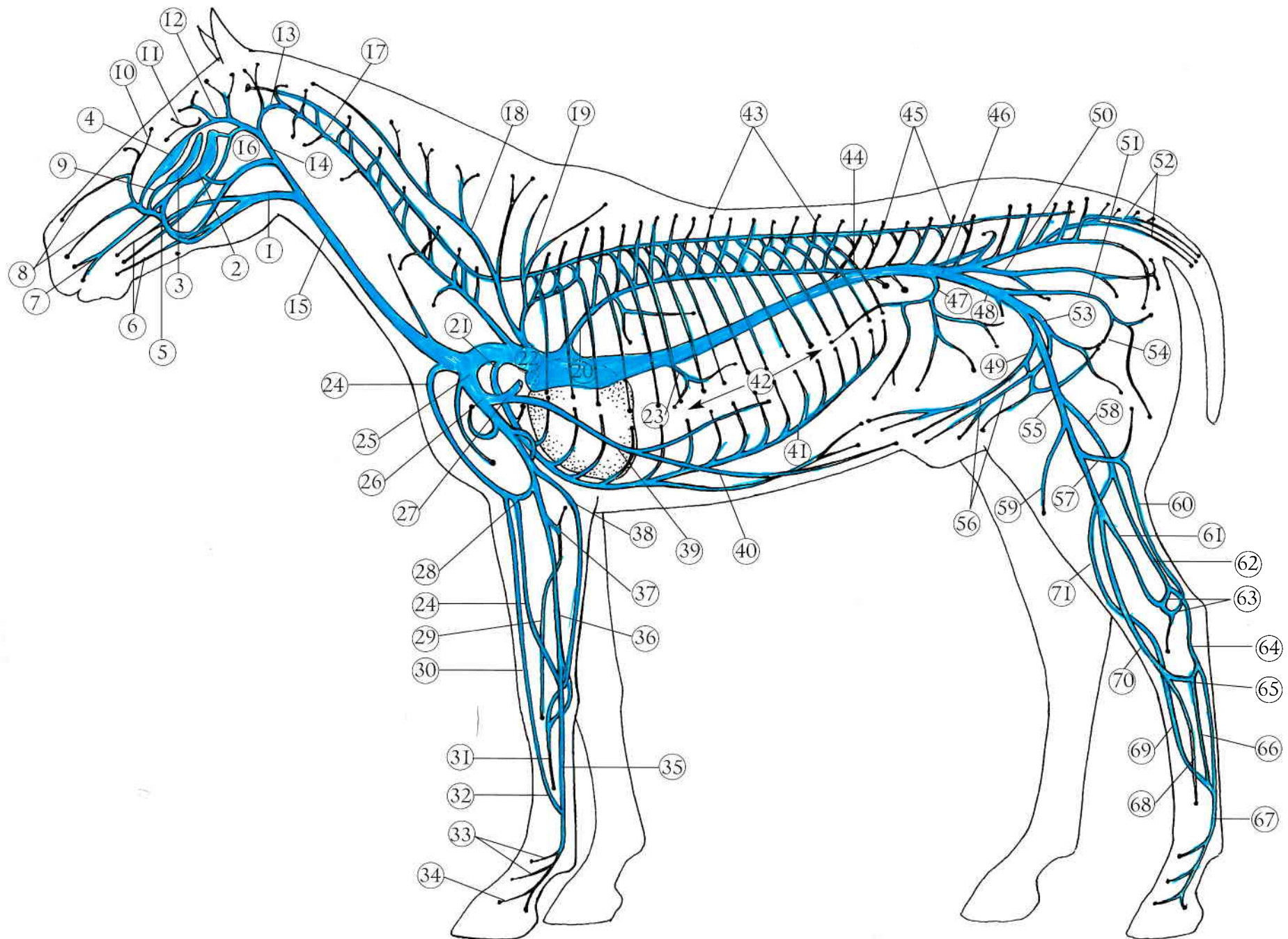
MAJOR VEINS – Lateral

Overview (Figure 35)

Identify the following and colour-match the numbered circles with those on the drawing; colour each vein in blue.

- | | | |
|--|--|---|
| ① Linguofacial vein | ②④ Cephalic vein | ⑤③ Deep femoral vein |
| ② Sinus of buccal vein | ②⑤ Subclavian vein | ⑤④ Penile veins |
| ③ Sinus of deep facial vein | ②⑥ Axillary vein | ⑤⑤ Femoral vein |
| ④ Sinus of transverse facial vein | ②⑦ Subscapular vein | ⑤⑥ Epigastric veins |
| ⑤ Buccal vein | ②⑧ Transverse cubital vein | ⑤⑦ Distal caudal femoral vein |
| ⑥ Lingual and sublingual veins | ②⑨ Cranial interosseus vein | ⑤⑧ Medial saphenous vein |
| ⑦ Inferior and superior labial veins | ③⑩ Accessory cephalic vein | ⑤⑨ Descending genual vein |
| ⑧ Dorsal and lateral nasal veins | ③⑪ Medial and lateral palmar metacarpal veins | ⑥⑩ Lateral saphenous vein |
| ⑨ Deep facial vein | ③⑫ Dorsal common digital vein | ⑥⑪ Caudal tibial vein |
| ⑩ Angularis oculi vein | ③⑬ Dorsal branches from 1st, 2nd and 3rd phalanges | ⑥⑫ Caudal medial saphenous vein |
| ⑪ Supraorbital vein | ③⑭ Coronary venous plexus | ⑥⑬ Caudal tibial anastomoses with saphenous veins |
| ⑫ Transverse facial vein | ③⑮ Medial palmar vein | ⑥⑭ Medial and lateral plantar veins |
| ⑬ Vertebral occipital vein anastomosis | ③⑯ Median vein | ⑥⑮ Perforating tarsal vein |
| ⑭ Maxillary vein | ③⑰ Common interosseus vein | ⑥⑯ Medial and lateral plantar metatarsal veins |
| ⑮ External jugular vein | ③⑱ Collateral ulnar vein | ⑥⑰ Medial and lateral plantar digital veins |
| ⑯ Inferior (mandibular) alveolar vein | ③⑲ Superficial thoracic vein | ⑥⑱ Dorsal metatarsal vein |
| ⑰ Vertebral vein | ③⑳ External thoracic vein | ⑥㉑ Dorsal common digital vein |
| ⑱ Deep cervical vein | ③㉑ Musculophrenic vein | ⑥㉒ Dorsal pedal vein |
| ㉑ Dorsal scapular vein | ③㉒ Ventral intercostal veins | ⑥㉓ Cranial medial saphenous vein |
| ㉒ Azygos vein | ③㉓ Spinal branches of intercostal veins | |
| ㉓ Internal thoracic vein | ③㉔ Costoabdominal vein | |
| ㉔ Costocervical vein | ③㉕ Lumbar veins | |
| ㉕ Cranial phrenic vein | ③㉖ Common iliac vein | |
| | ③㉗ Deep circumflex iliac vein | |
| | ③㉘ External iliac vein | |
| | ③㉙ Pudendoepigastric vein | |
| | ③㉚ Internal pudendal vein | |
| | ③㉛ Obturator vein | |
| | ③㉜ Caudal veins | |

FIGURE 35: MAJOR VEINS – Lateral Overview



ARTERIES OF THE LOWER LIMBS – Cranial and Caudal Views of Fore and Hind

(Figure 36)

Figs. 36(a) and (b) Arteries of the Lower Forelimb

Identify and colour:

- ① Cranial interosseous artery
- ② Dorsal carpal branch from transverse cubital
- ③ Dorsal carpal branch of proximal radial artery
- ④ Medial and lateral dorsal metacarpal arteries
- ⑤ Dorsal branches of palmar digital arteries to 1st, 2nd and 3rd phalanges (on both drawings)
- ⑥ Proximal radial artery
- ⑦ Radial artery
- ⑧ Median artery
- ⑨ Deep palmar arch
- ⑩ Lateral palmar artery
- ⑪ Medial palmar artery
- ⑫ Medial and lateral palmar metacarpal arteries
- ⑬ Medial and lateral palmar digital arteries
- ⑭ Terminal arch (palmar digital arteries uniting inside 3rd phalanx)
- ⑮ Collateral ulnar artery

Figs. 36(c) and (d) Arteries of the Lower Hind Limb

Identify and colour:

- ① Cranial tibial artery
- ② Dorsal pedal artery
- ③ Dorsal metatarsal artery
- ④ Distal perforating artery (on both drawings)
- ⑤ Distal caudal femoral artery
- ⑥ Caudal tibial artery
- ⑦ Caudal saphenous artery
- ⑧ Medial and lateral plantar arteries
- ⑨ Medial and lateral plantar metatarsal arteries
- ⑩ Medial and lateral plantar digital arteries
- ⑪ Dorsal branches of plantar digital arteries to 1st, 2nd and 3rd phalanges
- ⑫ Terminal arch (plantar digital arteries uniting inside 3rd phalanx)

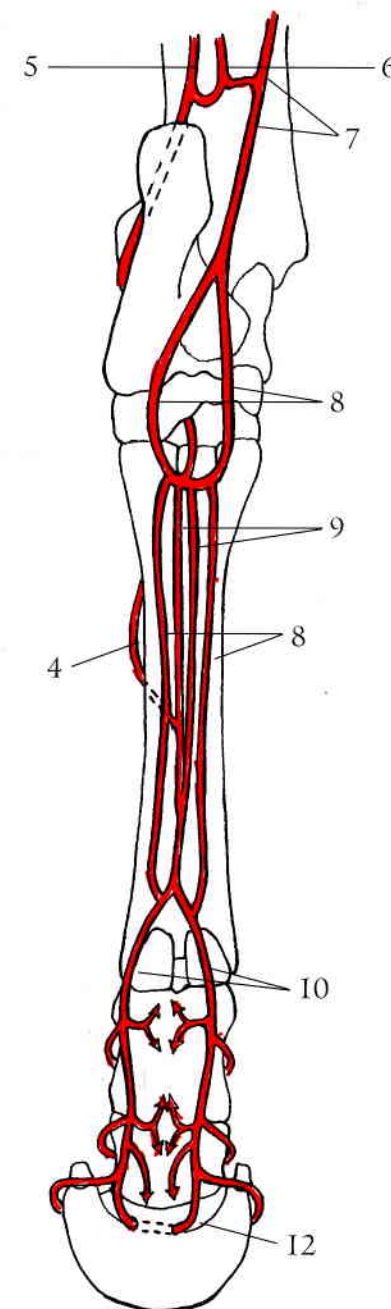
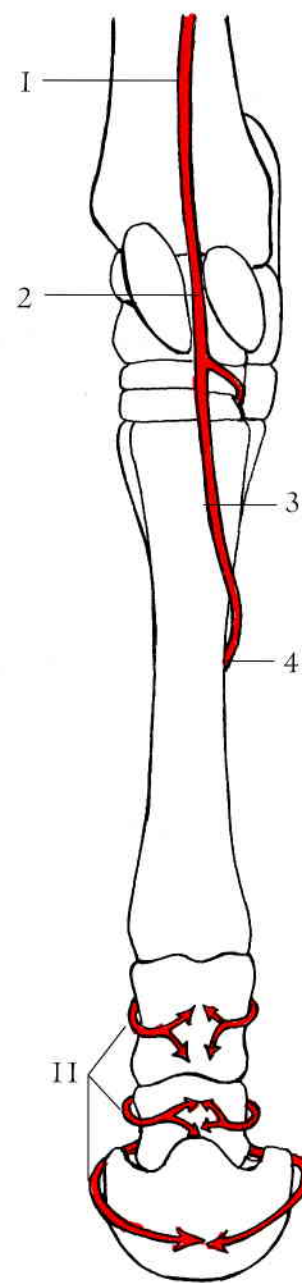
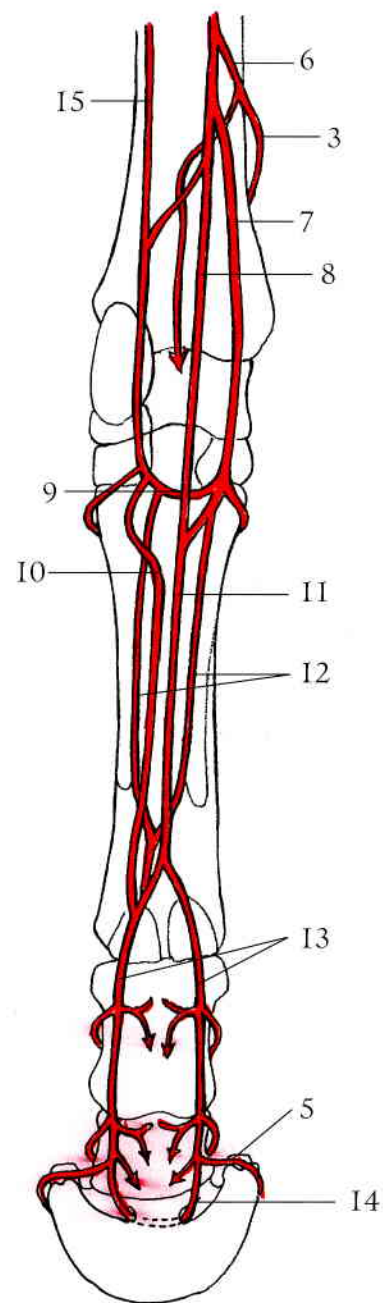
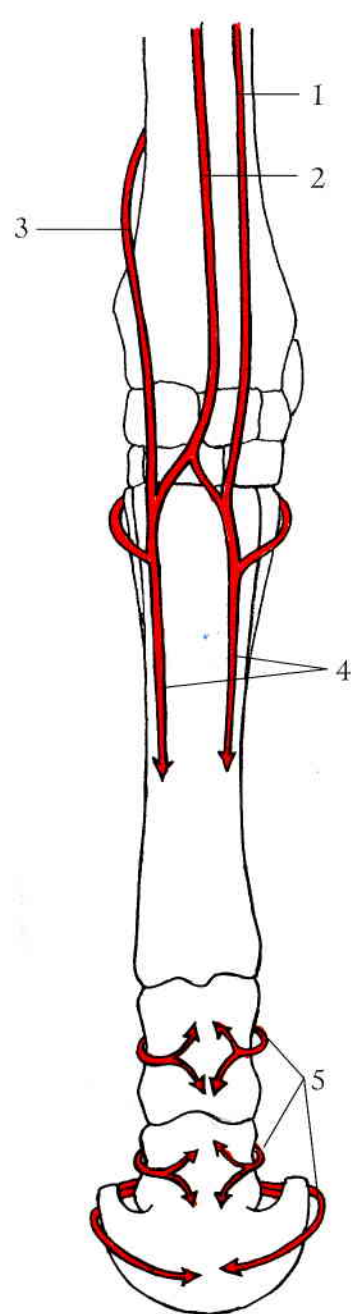


Fig. 36(a) Lower forelimb – cranial view

Fig. 36(b) Lower forelimb – caudal view

Fig. 36(c) Lower hind limb – cranial view

Fig. 36(d) Lower hind limb – caudal view

VEINS OF THE LOWER LIMBS – Cranial and Caudal Views of Fore and Hind (Figure 37)

Figs. 37(a) and (b) Veins of the Lower Forelimb

Identify and colour the following on one or both of the drawings as appropriate.

- ① Cranial interosseous vein
- ② Accessory cephalic vein
- ③ Dorsal common digital vein
- ④ Dorsal branches of 1st, 2nd and 3rd phalanges
- ⑤ Coronary venous plexus
- ⑥ Collateral ulnar vein
- ⑦ Cephalic vein
- ⑧ Median vein
- ⑨ Radial vein
- ⑩ Deep palmar arch
- ⑪ Medial palmar vein (palmar common digital)
- ⑫ Lateral palmar vein
- ⑬ Medial and lateral palmar metacarpal veins
- ⑭ Medial and lateral palmar digital veins (palmar proper digitals)
- ⑮ Terminal arch

Figs. 37(c) and (d) Veins of the Lower Hind Limb

Identify and colour:

- ① Cranial and medial saphenous veins
- ② Cranial tibial vein
- ③ Dorsal pedal vein
- ④ Perforating tarsal vein
- ⑤ Dorsal metatarsal vein
- ⑥ Dorsal common digital vein
- ⑦ Caudal tibial vein
- ⑧ Caudal medial saphenous vein
- ⑨ Lateral saphenous vein
- ⑩ Medial and lateral plantar veins (plantar common digitals)
- ⑪ Medial and lateral plantar metatarsal veins
- ⑫ Distal perforating vein
- ⑬ Medial and lateral plantar digital veins
- ⑭ Dorsal branches of 1st, 2nd and 3rd phalanges
- ⑮ Coronary venous plexus
- ⑯ Terminal arch

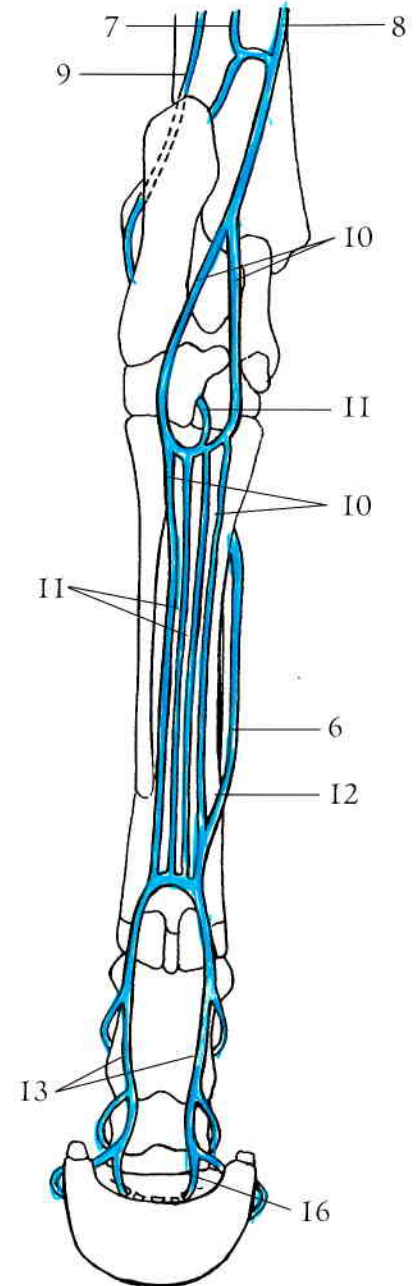
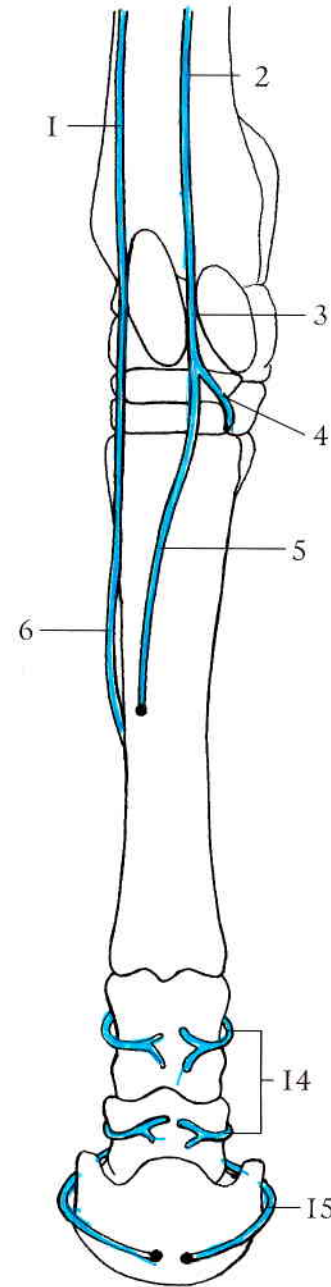
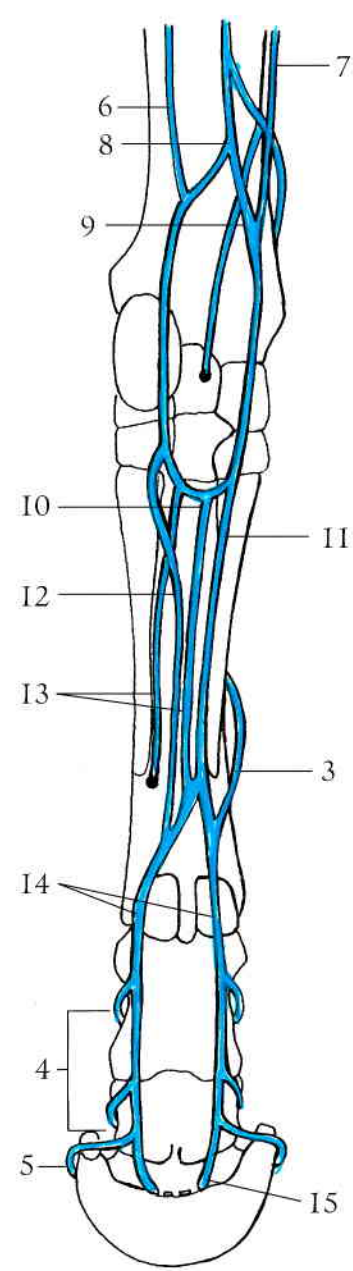
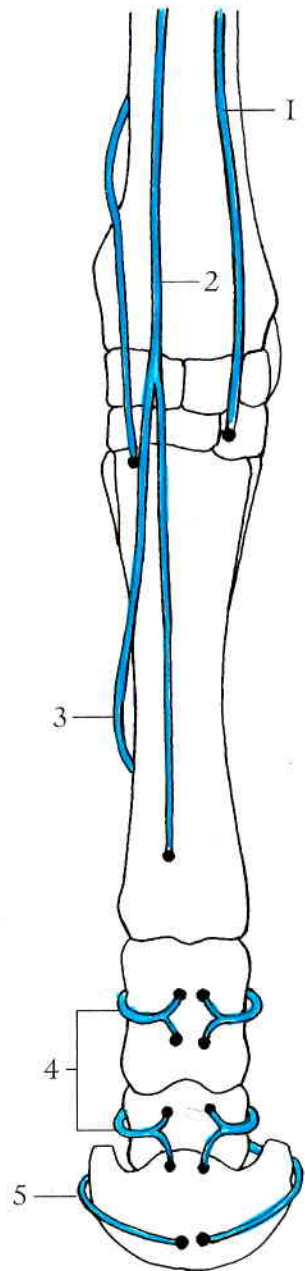


Fig. 37(a) Lower forelimb – cranial view

Fig. 37(b) Lower forelimb – caudal view

Fig. 37(c) Lower hind limb – cranial view

Fig. 37(d) Lower hind limb – caudal view

BLOOD VESSELS OF THE LOWER LIMBS – Lateral and Medial Views (Figure 38)

These drawings also show the nerves of the lower limbs, which are identified in Figure 43.

Identify and colour-match the numbered circles with those on the drawings on which they appear – colour the arteries red and the veins blue.

- ① Lateral palmar (plantar) vein
- ② Lateral palmar (plantar) artery
- ③ Lateral palmar (plantar) digital vein
- ④ Lateral palmar (plantar) digital artery
- ⑤ Cephalic vein
- ⑥ Medial palmar (plantar) vein
- ⑦ Medial palmar (plantar) artery
- ⑧ Medial palmar (plantar) digital vein
- ⑨ Medial palmar (plantar) digital artery
- ⑩ Dorsal pedal artery
- ⑪ Dorsal pedal vein
- ⑫ Dorsal metatarsal vein
- ⑬ Caudal branch of lateral saphenous vein
- ⑭ Caudal femoral artery
- ⑮ Caudal fibial vein
- ⑯ Caudal fibial artery
- ⑰ Caudal branch of medial saphenous vein
- ⑱ Caudal saphenous artery
- ⑲ Dorsal common digital vein
- ⑳ Cranial branch of medial saphenous vein
- ㉑ Cranial saphenous artery
- ㉒ Coronary venous plexus

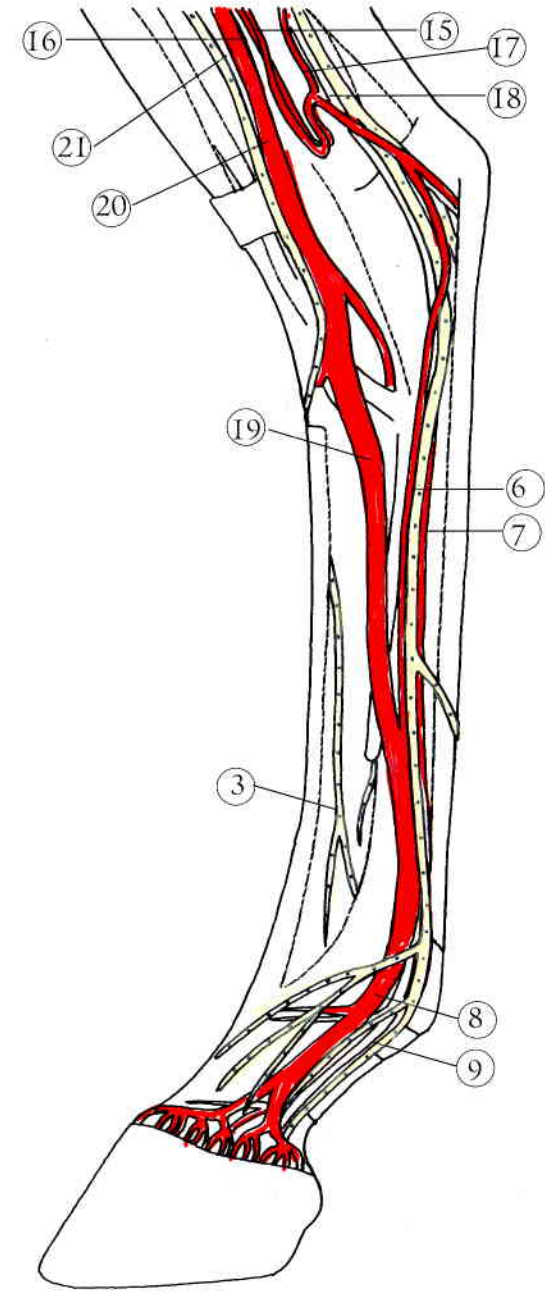
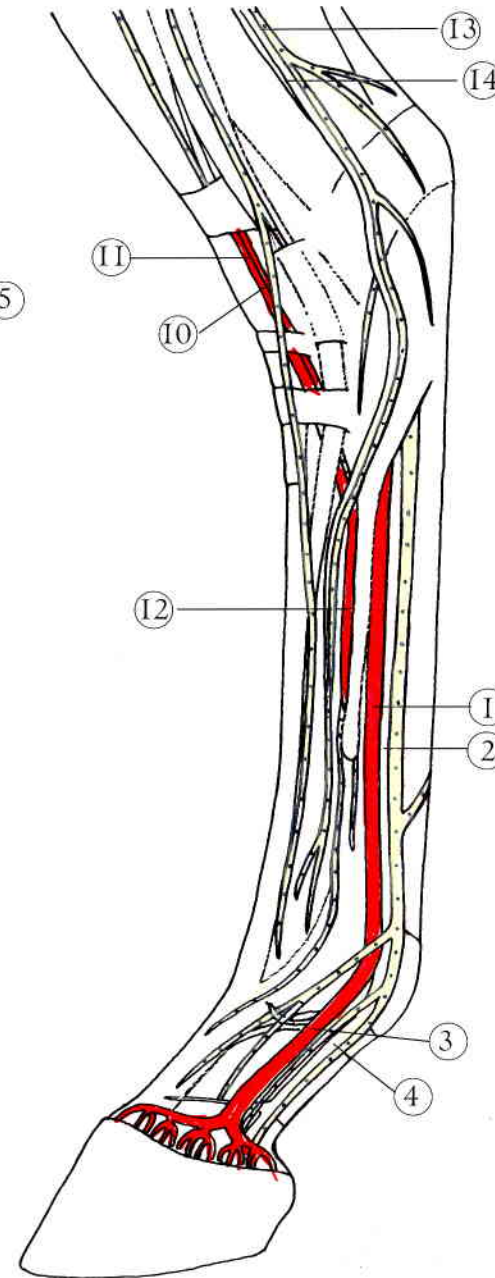
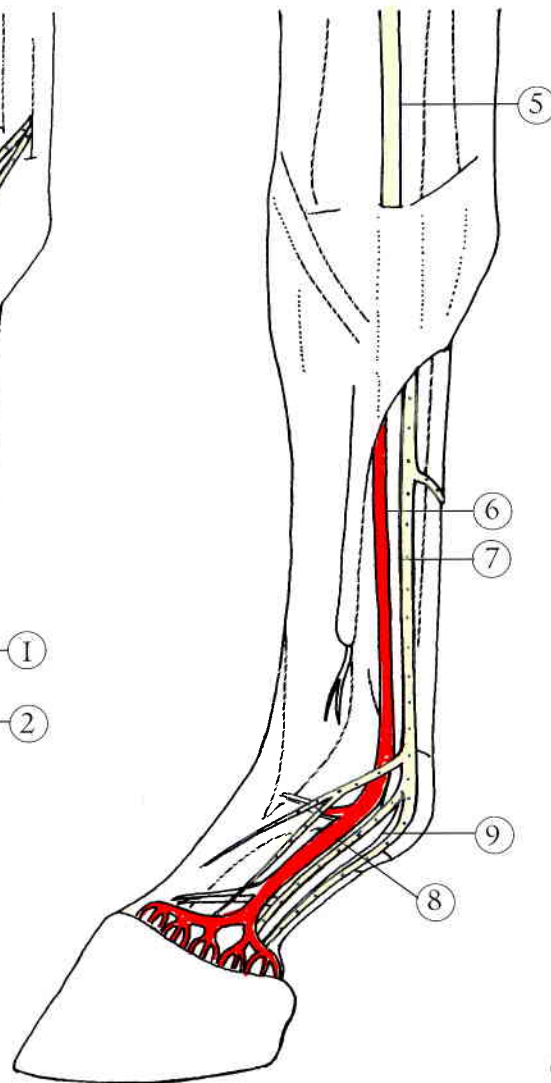
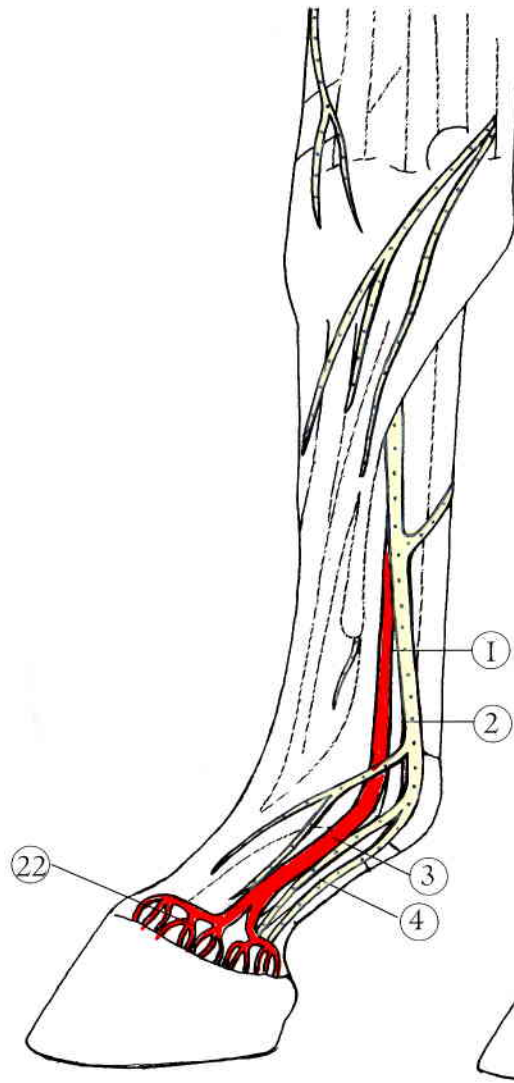


Fig. 38(a) Lower forelimb – lateral view

Fig. 38(b) Lower forelimb – medial view

Fig. 38(c) Lower hind limb – lateral view

Fig. 38(d) Lower hind limb – medial view

MAJOR LYMPH NODE GROUPS – Lateral View (Figure 39)

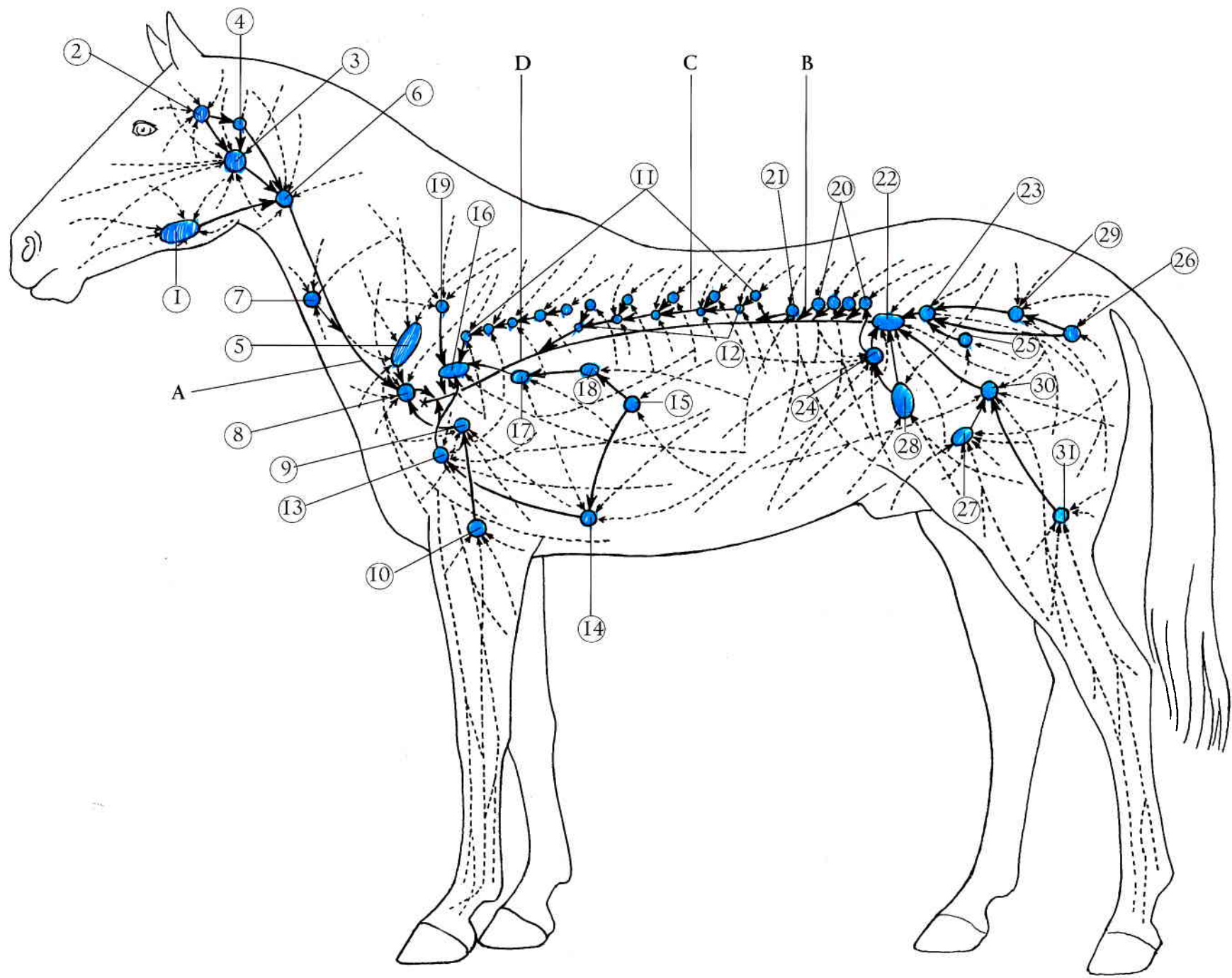
Label the following major lymph nodes and ducts:

- A Tracheal duct
- B Lumbar lymph duct
- C Cisterni chيلي
- D Thoracic duct

Identify the following and colour-match the numbered circles with those on the drawing.

- ① Mandibular nodes – lymph from skin of face; most of muscles and bones of head; nasal cavity, gums, teeth, tongue, hard palate and salivary glands
- ② Parotid nodes – lymph from skin of eyelids, cranial and parotid regions; jaw and eyeball muscles; lacrimal and parotid glands
- ③ Medial and ④ Lateral retropharyngeal nodes – lymph from bones, muscles, deep structures of head and cranial neck
- ⑤ Superficial cervical nodes – lymph from skin of ear, back of head, neck, shoulder, thorax and entire forelimb; jaw joint and bones and joints of forelimb (except ulna and elbow joint); muscles of shoulder and breast, digital flexor and extensor tendons
- ⑥ Cranial, ⑦ Middle, ⑧ Caudal deep cervical nodes
- ⑨ Axillary nodes – lymph from skin of shoulder, arm, thorax, cranial abdominal wall; shoulder and elbow joints and muscles of shoulder, arm and chest
- ⑩ Cubital nodes – lymph from skin, muscles, bones and joints of forelimb distal to node, elbow joint and brachiocephalic muscle
- ⑪ Intercostal nodes – lymph from muscles of back, upper thorax and abdominal wall; pleura, mediastinum and diaphragm
- ⑫ Thoracic aortic nodes – drainage as for intercostals, but also from liver
- ⑬ Cranial and ⑭ Caudal sternal nodes
- ⑮ Phrenic nodes – small, inconstant
- ⑯ Cranial, ⑰ Middle and ⑱ Caudal mediastinal nodes
- ⑲ Nuchal node – lymph from deep muscles of neck
- ⑳ Lumbar aortic nodes – lymph from muscles of back and loins; peritoneum and caudal pleura; urogenital organs and kidneys
- ㉑ Renal nodes – lymph from adrenal gland, kidney and ureter; peritoneum, liver and duodenum; testicle
- ㉒ Medial iliac nodes – lymph from muscles of loins, sacral region, thigh and hip joint; peritoneum and caudal pleura; urogenital organs
- ㉓ Sacral nodes – lymph from muscles of rump and thigh; vagina (in mare); seminal vesicles, prostate and bulbourethral glands (in stallion)
- ㉔ Lateral iliac nodes – lymph from abdominal muscles, kidney and diaphragm; peritoneum and caudal pleura
- ㉕ Obturator node – lymph from iliopsoas and cranial thigh muscles and hip joint
- ㉖ Anorectal nodes – lymph from skin and muscles of tail; rectum; anus; uterus, vagina, vulva and clitoris (in mares)
- ㉗ Superficial inguinal nodes – lymph from skin and muscles of caudal thoracic and abdominal wall; skin of hind limb; udder, vulva and clitoris (in mare); scrotum, prepuce and penis (in stallion)
- ㉘ Subiliac (prefemoral) nodes – lymph from skin of dorsal and lateral thorax and abdominal wall, lumbar and pelvic regions including thigh and stifle joint
- ㉙ Ischiatic nodes – lymph from tail, thigh muscles
- ㉚ Deep inguinal nodes – lymph from muscles of abdominal wall, cremaster muscle, all muscles of pelvis and thigh regions, muscles, tendons and joints of leg, foot, peritoneum and penis
- ㉛ Popliteal nodes

FIGURE 39: MAJOR LYMPH NODE GROUPS – Lateral View



PART 5 – The Nervous System

THE BRAIN – Various Views (Figure 40)

Figs. 40(a) Ventral View (Including Nerve Roots), (b) Dorsal View, (c) Lateral View and (d) Median Section

On Fig. (a), label the following cranial nerve roots:

- ① Olfactory nerves
- ② Optic nerve
- ③ Oculomotor nerve
- ④ Trochlear nerve
- ⑤ Trigeminal nerve
- ⑥ Abducent nerve
- ⑦ Facial nerve
- ⑧ Vestibulocochlear nerve
- ⑨ Glossopharyngeal nerve
- ⑩ Vagus nerve
- ⑪ Accessory nerve
- ⑫ Hypoglossal nerve

On Fig.(b), label:

- A Left cerebral hemisphere
- B Right cerebral hemisphere
- C Gyri (convulsions)
- D Sulci (grooves)
- E Longitudinal fissure
- F Cerebellum

On all drawings on which they occur, identify and colour the following:

Forebrain

- ① Spinal cord
- ② Transverse cerebral fissure (separating cerebellum from cerebral hemisphere)
- ③ Frontal lobe
- ④ Parietal lobe
- ⑤ Occipital lobe
- ⑥ Temporal lobe
- ⑦ Olfactory lobe
- ⑧ Body of corpus callosum
- ⑨ Septum pellucidum
- ⑩ Olfactory tracts
- ⑪ Olfactory bulbs
- ⑫ Terminal lamina (thin rostral wall of brain stem in forebrain)
- ⑬ 3rd ventricle
- ⑭ Thalamus
- ⑮ Optic chiasma
- ⑯ Optic tract
- ⑰ Hypophysis (pituitary gland)
- ⑱ Mammillary body
- ⑲ Epiphysis

Midbrain

- ⑳ Cerebral crus
- ㉑ Tectum
- ㉒ Tegmentum

Hindbrain

- ㉓ Medulla oblongata
- ㉔ Pons
- ㉕ 4th ventricle
- ㉖ Cerebellar cortex
- ㉗ Cerebellar white matter

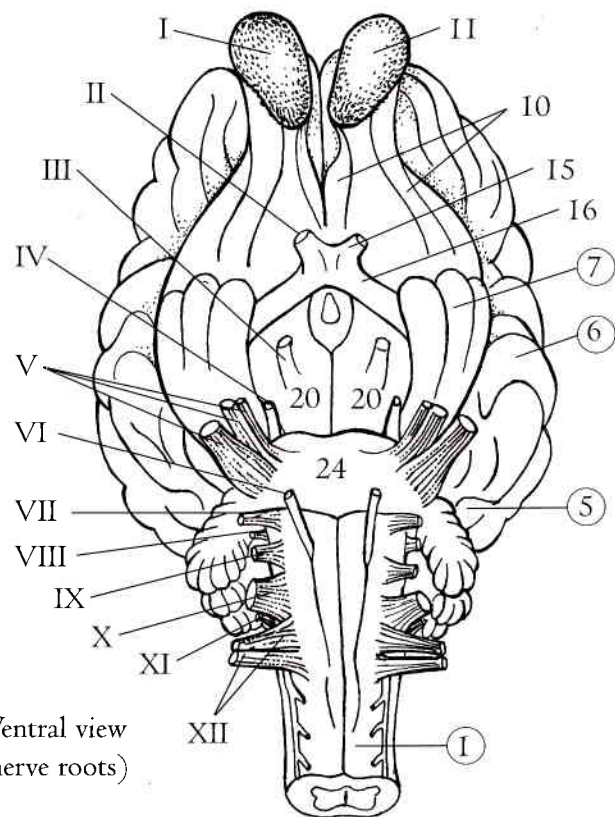


Fig. 40(a) Ventral view
(including nerve roots)

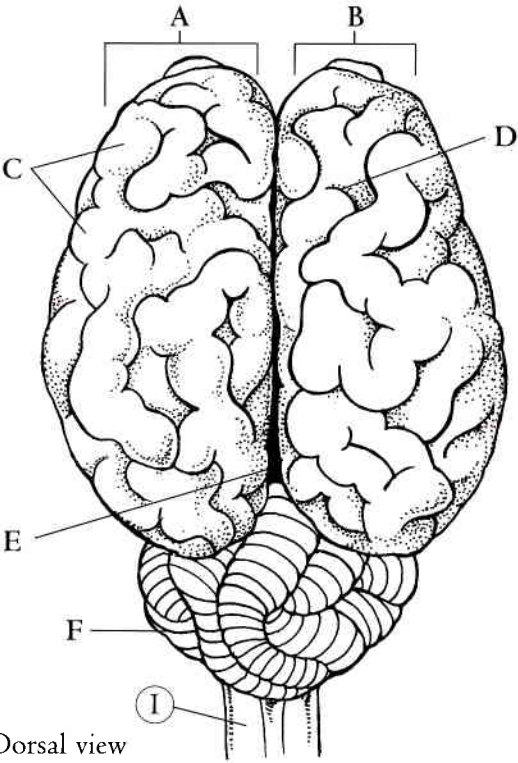


Fig. 40(b) Dorsal view

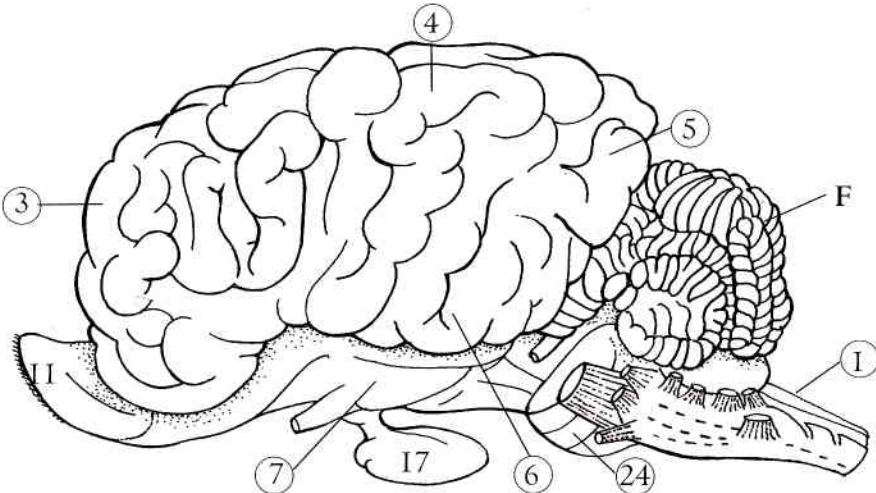


Fig. 40(c) Lateral view

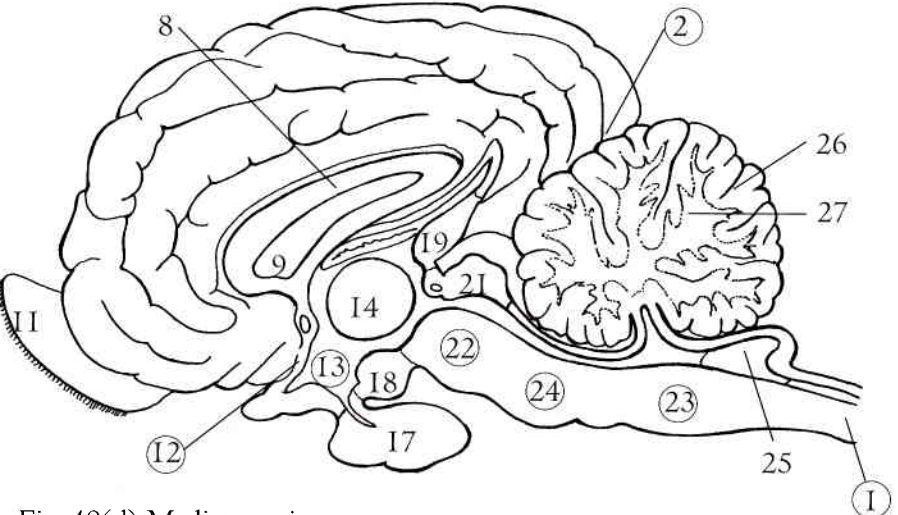


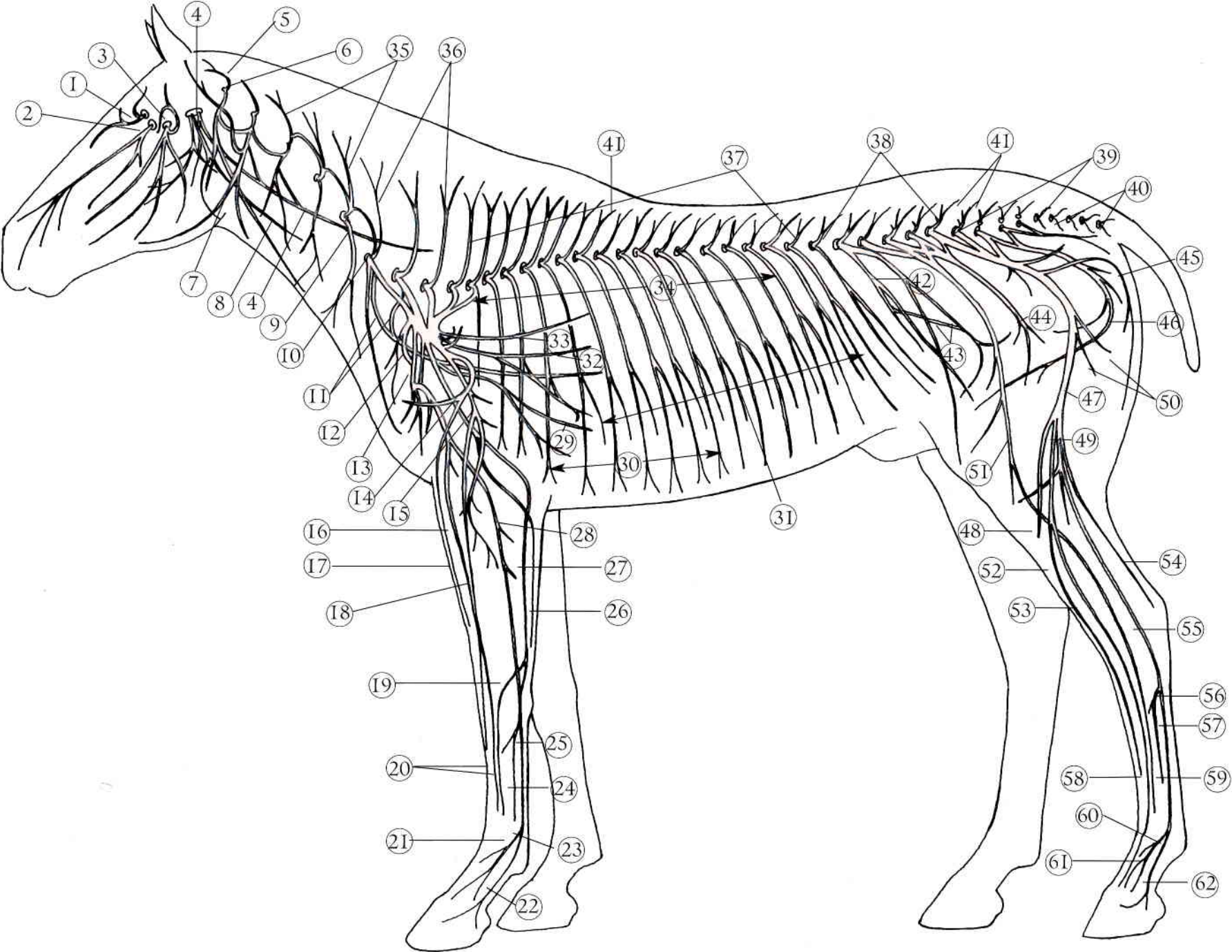
Fig. 40(d) Median section

PERIPHERAL NERVES – Lateral Overview (Figure 41)

Identify the following and colour-match the numbered circles with those on the drawing. Where possible, fill in the nerves with one overall colour.

- | | | |
|---|--|---|
| ① Ophthalmic component of trigeminal nerve | ②④ Medial and lateral palmar metacarpal nerves | ⑤③ Deep peroneal nerve |
| ② Maxillary component of trigeminal nerve | ②⑤ Lateral palmar nerve | ⑤④ Caudal cutaneous sural nerve |
| ③ Mandibular component of trigeminal nerve | ②⑥ Caudal cutaneous antebrachial nerve | ⑤⑤ Tibial nerve |
| ④ Accessory nerve | ②⑦ Ulnar nerve | ⑤⑥ Deep branch of lateral plantar nerve |
| ⑤ Suboccipital nerve | ②⑧ Median nerve | ⑤⑦ Lateral plantar nerve |
| ⑥ Ventral rami of cervical nerves C1 to C8 | ②⑨ Lateral thoracic nerve | ⑤⑧ Medial and lateral dorsal metatarsal nerves |
| ⑦ Transverse cervical nerve | ③⑩ Ventral cutaneous nerves of thorax | ⑤⑨ Medial and lateral plantar metatarsal nerves |
| ⑧ Vagus nerve | ③⑪ Lateral cutaneous nerves of thorax | ⑥⑩ Dorsal branch of plantar digital nerve |
| ⑨ Ventral rami C3 to C5 | ③⑫ Thoracodorsal nerve | ⑥⑪ Intermediate branch of plantar digital nerve |
| ⑩ Ventral rami C6 to C8 | ③⑬ Long thoracic nerve | ⑥⑫ Plantar branch of plantar digital nerve |
| ⑪ Phrenic nerve C5 to C7 | ③⑭ Intercostal nerves T2 to T17 | |
| ⑫ Suprascapular nerve | ③⑮ Dorsal rami C3 to C5 | |
| ⑬ Musculocutaneous nerve | ③⑯ Dorsal rami C6 to C8 | |
| ⑭ Axillary nerve | ③⑰ Dorsal rami of thoracic nerves T1 to T18 | |
| ⑮ Radial nerve | ③⑱ Dorsal rami of lumbar nerves L1 to L6 | |
| ⑯ Medial cutaneous antebrachial nerve | ③⑲ Dorsal rami of sacral nerves S1 to S5 | |
| ⑰ Cranial cutaneous antebrachial nerve | ④⑰ Dorsal rami of caudal nerves Cd 1 to Cd5 | |
| ⑱ Lateral cutaneous antebrachial nerve | ④① Dorsal cutaneous nerves | |
| ⑲ Dorsal branch of ulnar nerve | ④② Ilioinguinal nerve L2 | |
| ⑳ Medial and lateral dorsal metacarpal nerves | ④③ Genitofemoral nerve L3 and L4 | |
| ㉑ Dorsal branch of palmar digital nerve | ④④ Obturator nerve | |
| ㉒ Palmar branch of palmar digital nerve | ④⑤ Caudal cutaneous femoral nerve | |
| ㉓ Medial and lateral palmar digital nerves | ④⑥ Dorsal penile (clitoridal) nerve | |
| | ④⑦ Ischiatic nerve | |
| | ④⑧ Lateral cutaneous sural nerve | |
| | ④⑨ Common peroneal nerve | |
| | ⑤⑰ Motor branches from ischiatic nerve | |
| | ⑤① Saphenous nerve | |
| | ⑤② Superficial peroneal nerve | |

FIGURE 41: PERIPHERAL NERVES – Lateral Overview



NERVES OF THE LOWER LIMBS – Cranial and Caudal Views (Figure 42)

Figs. 42(a) and (b) Lower Forelimb – Cranial and Caudal Views

Identify and colour the following on one or both drawings as appropriate.

- ① Cranial cutaneous antebrachial nerve
- ② Medial cutaneous antebrachial nerve
- ③ Lateral cutaneous antebrachial nerve
- ④ Dorsal branch of ulnar nerve
- ⑤ Medial and lateral dorsal metacarpal nerves
- ⑥ Dorsal branch of palmar digital nerve
- ⑦ Palmar branch of palmar digital nerve
- ⑧ Ulnar nerve
- ⑨ Median nerve
- ⑩ Palmar branch of ulnar nerve
- ⑪ Medial palmar nerve
- ⑫ Lateral palmar nerve
- ⑬ Deep branch of median and ulnar nerve
- ⑭ Medial and lateral palmar metacarpal nerves
- ⑮ Communicating branch between palmar nerves
- ⑯ Medial and lateral palmar digital nerves

Figs. 42(c) and (d) Lower Hind Limb – Cranial and Caudal Views

Identify and colour:

- ① Saphenous nerve
- ② Superficial peroneal nerve
- ③ Deep peroneal nerve
- ④ Medial and lateral dorsal metatarsal nerves
- ⑤ Medial and lateral dorsal digital nerves
- ⑥ Caudal cutaneous sural nerve
- ⑦ Tibial nerve
- ⑧ Medial plantar nerve
- ⑨ Deep branch of lateral plantar nerve
- ⑩ Lateral plantar nerve
- ⑪ Medial and lateral plantar metatarsal nerves
- ⑫ Communicating branch between medial and lateral plantar nerves
- ⑬ Medial and lateral plantar digital nerves
- ⑭ Dorsal branch of plantar digital nerve
- ⑮ Intermediate branch of plantar digital nerve
- ⑯ Plantar branch of plantar digital nerve (both drawings)

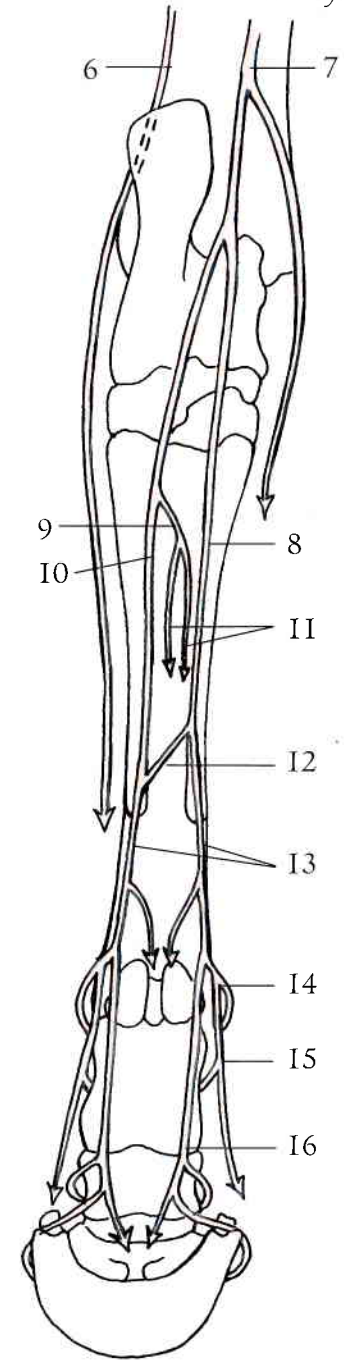
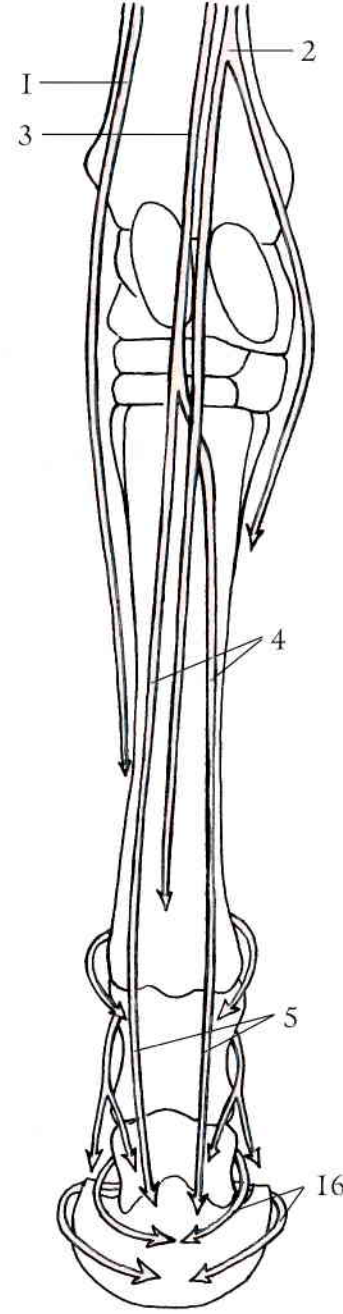
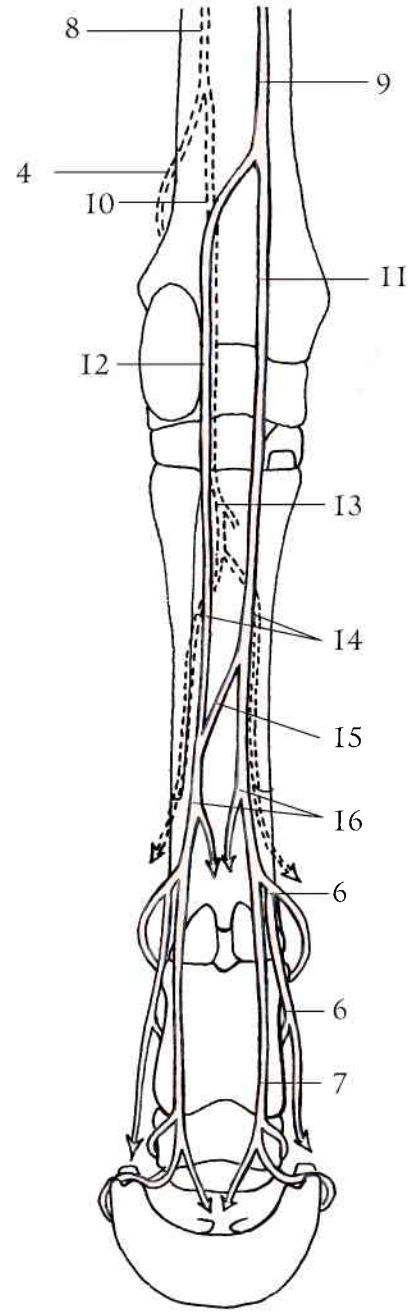
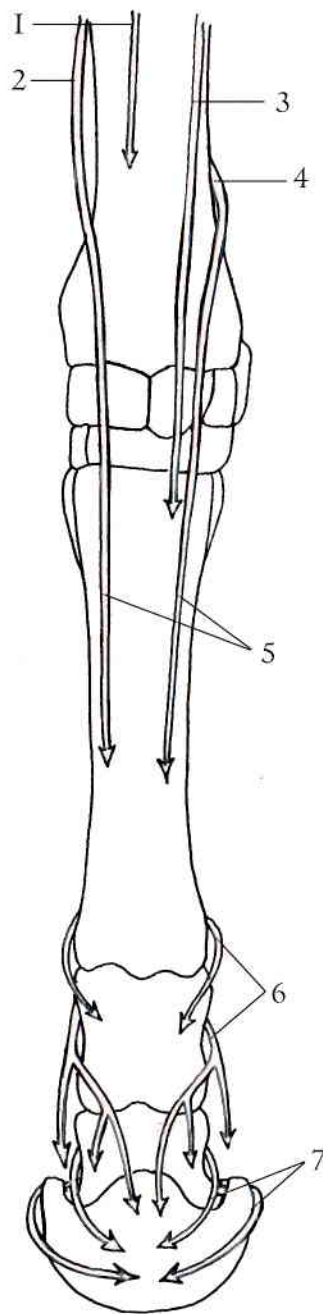


Fig. 42(a) Lower forelimb – cranial view

Fig. 42(b) Lower forelimb – caudal view

Fig. 42(c) Lower hind limb – cranial view

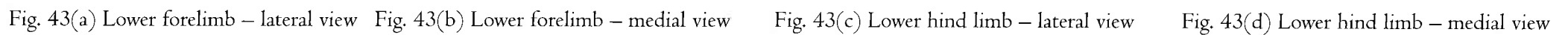
Fig. 42(d) Lower hind limb – caudal view

NERVES OF THE LOWER LIMBS – Lateral and Medial Views (Figure 43)

These drawings also show the blood vessels of the lower limbs, which are identified in Figure 38.

On all drawings on which they occur, identify and colour the following.

- ① Dorsal branch of the ulnar nerve
- ② Lateral palmar (plantar) nerve
- ③ Communicating branch between palmar (plantar) nerves
- ④ Lateral palmar (plantar) digital nerve
- ⑤ Medial palmar (plantar) nerve
- ⑥ Medial palmar (plantar) digital nerve
- ⑦ Dorsal branch of palmar (plantar) digital nerve
- ⑧ Lateral plantar (caudal) cutaneous sural nerve
- ⑨ Palmar branch of palmar (plantar) digital nerve
- ⑩ Superficial peroneal nerve
- ⑪ Deep peroneal nerve
- ⑫ Tibial nerve
- ⑬ Saphenous nerve
- ⑭ Intermediate branch of palmar (plantar) digital nerve
- ⑮ Medial and lateral palmar metacarpal (plantar metatarsal) nerves
- ⑯ Medial and lateral dorsal metatarsal nerves



PART 6 – *The Head*

SURFACE FEATURES AND SUBCUTANEOUS STRUCTURES OF THE HEAD – Lateral Views

(Figure 44)

Fig. 44(a) Surface Features

Identify and colour-match the numbered circles with those on the drawing.

- ① External nostril (comma shaped)
- ② Dorsal nasal commissure (false nostril leading into blind-ending nasal diverticulum)
- ③ Ventral nasal commissure (true nostril leading into nasal vestibule)
- ④ Medial nostril wing (supported by laminae of alar cartilage)
- ⑤ Lateral nostril wing (without cartilage support)
- ⑥ Upper lip
- ⑦ Lower lip
- ⑧ Prominence of chin
- ⑨ Body of mandible
- ⑩ Facial artery
- ⑪ Vascular groove of ventral mandibular border for passage of facial artery and vein and parotid duct: used as a pulse point
- ⑫ Facial nerve
- ⑬ Upper eyelid

- ⑭ Lower eyelid
- ⑮ Medial angle (canthus) of eye
- ⑯ Lateral angle (canthus) of eye
- ⑰ Pinna (visible part of external ear)
- ⑱ Facial crest (attachment for masseter muscle)
- ⑲ Wing of atlas
- ⑳ Parotid salivary gland

Fig. 44(b) Subcutaneous Structures

Identify and colour:

- ① Nostril
- ② Transverse nasal muscle
- ③ Levator muscle of upper lip
- ④ Dorsal part of lateral nasal muscle
- ⑤ Nasolabial levator muscle
- ⑥ Canine muscle
- ⑦ Sphincter muscle of mouth
- ⑧ Buccinator muscle
- ⑨ Retractor muscle of angle of mouth
- ⑩ Depressor muscle of lower lip
- ⑪ Facial artery and vein
- ⑫ Facial muscle
- ⑬ Masseter muscle
- ⑭ Massetric artery and vein
- ⑮ Tendon of sternomandibular
- ⑯ Sternohyoid and omohyoid muscle
- ⑰ Depressor muscle of lower eyelid
- ⑱ Sphincter muscle of palpebral fissure
- ⑲ Levator muscle of medial angle of eye
- ⑳ Frontoscutular muscle
- ㉑ Interscutular muscle
- ㉒ Scutiform cartilage
- ㉓ Parotidauricular muscle
- ㉔ Cervicoauricular muscle
- ㉕ Greater auricular nerve
- ㉖ Parotid salivary gland
- ㉗ Splenius muscle
- ㉘ Cutaneous colli nerve
- ㉙ Brachiocephalic muscle
- ㉚ External jugular vein
- ㉛ Sternomandibular muscle

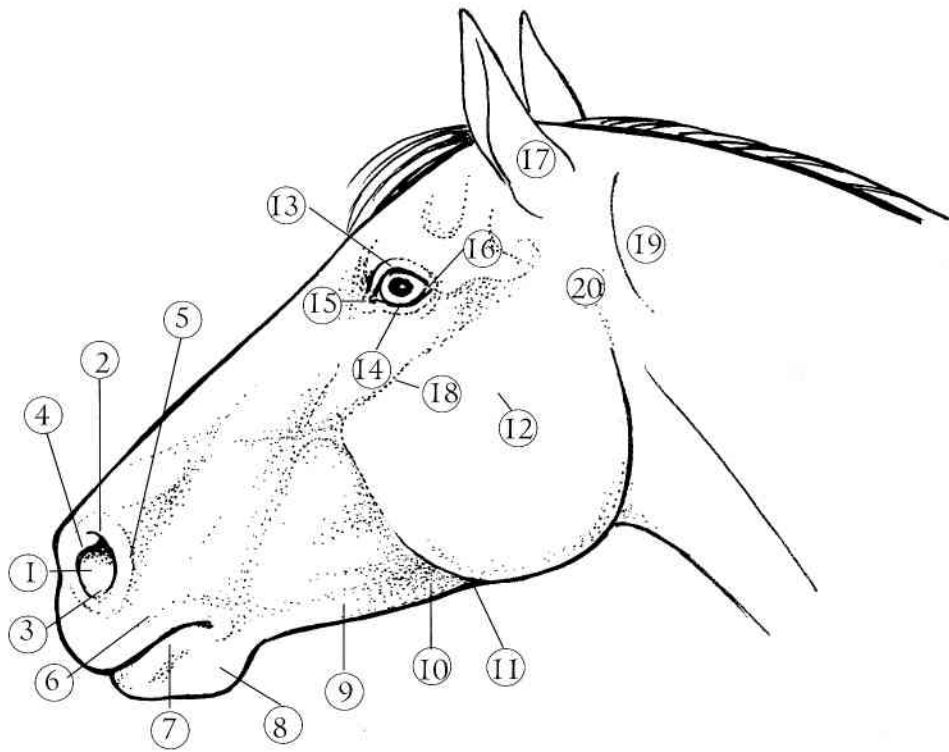


Fig. 44(a) Surface features

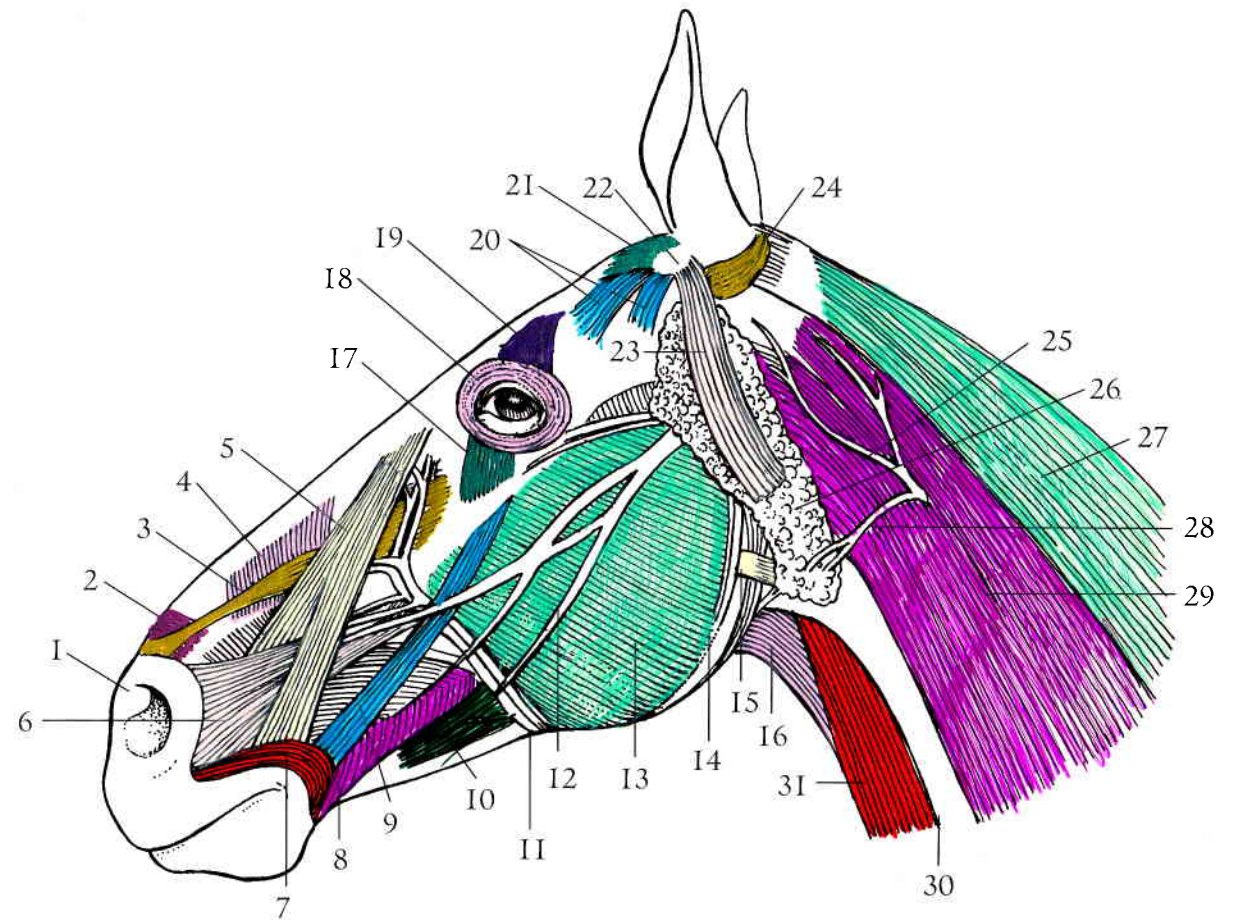


Fig. 44(b) Subcutaneous structures

DEEP STRUCTURES AND CAVITIES IN THE HEAD – Median Sections (Figure 45)

On both drawings as appropriate, label:

- A Dorsal nasal meatus
- B Middle nasal meatus
- C Ventral nasal meatus
- D Internal nostrils (exit from nasal cavity)
- E Laryngopharynx
- F Foramen magnum
- G Ethmoid conchae
- H Nasopharynx
- I Guttural pouch

On both drawings as appropriate, identify and colour the following.

- ① Dorsal nasal concha
- ② Ventral nasal concha
- ③ Frontal sinus
- ④ Cranial cavity
- ⑤ Sphenopalatine sinus
- ⑥ Hard palate
- ⑦ Ceratohyoid bone
- ⑧ Thyrohyoid bone
- ⑨ Stylohyoid bone
- ⑩ Epiglottic cartilage
- ⑪ Arytenoid cartilage
- ⑫ Thyroid cartilage

- ⑬ Lingual process
- ⑭ Soft palate
- ⑮ Pharyngeal opening of auditory tube
- ⑯ Opening into lateral laryngeal ventricle
- ⑰ Oesophagus
- ⑱ Trachea

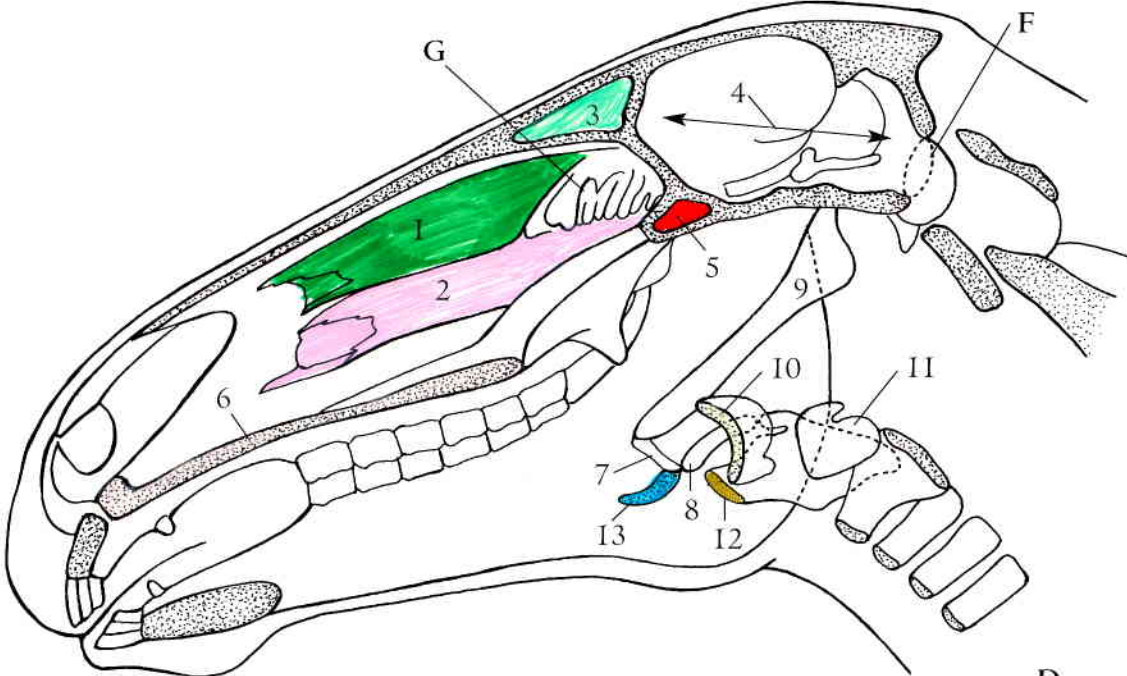


Fig. 45(a) The skull

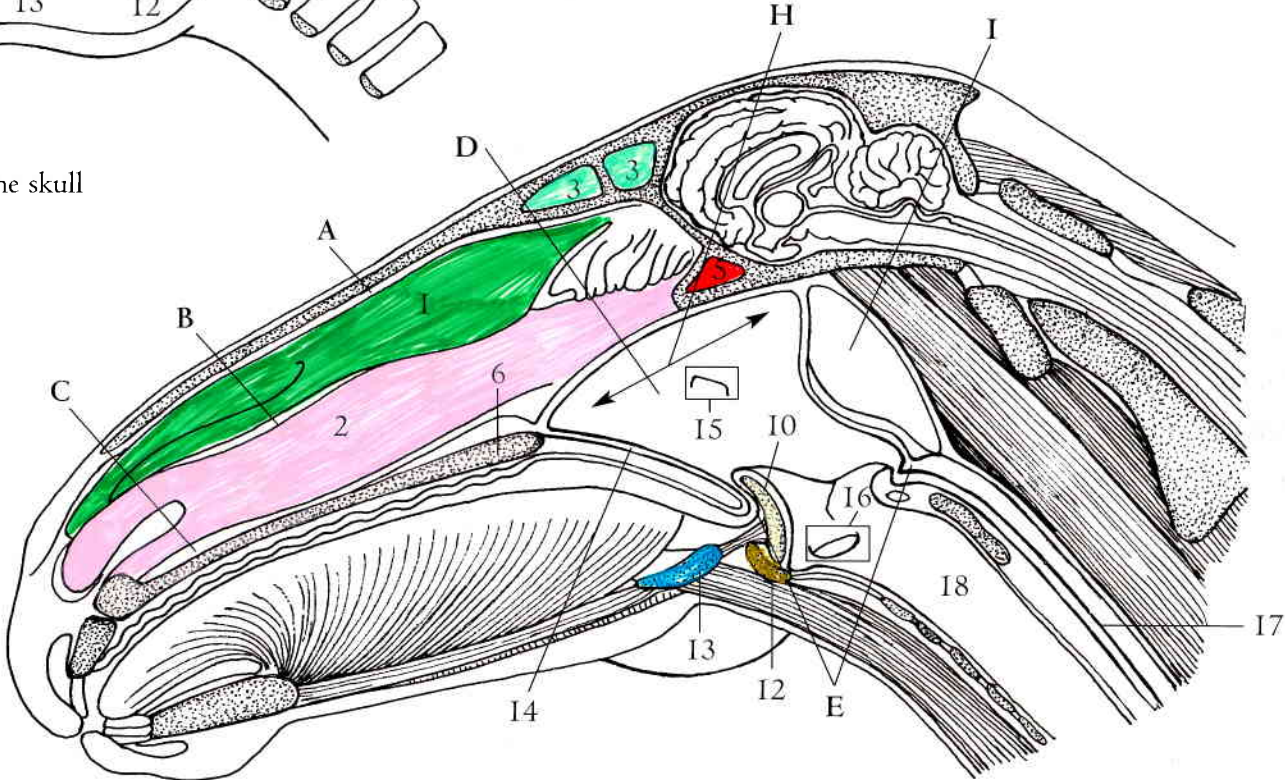


Fig. 45(b) The head

NASAL AND ORAL CAVITIES – Various Views (Figure 46)

(The small drawings show the orientation of the main drawings.)

On all drawings on which they occur, label the following.

- A Infraorbital canal
- B Nasolacrimal duct
- C Internal nostril
- D Tongue
- E Frontomaxillary opening

On all drawings on which they occur, identify and colour the following.

- ① Cranial cavity
- ② Nasal cavity
- ③ Caudal part of maxillary sinus
- ④ Rostral part of maxillary sinus
- ⑤ Nasopharynx
- ⑥ Laryngeal and tracheal cavities
- ⑦ Oral cavity
- ⑧ Oropharynx
- ⑨ Soft palate
- ⑩ Hard palate
- ⑪ Auditory (Eustachian) tube
- ⑫ Middle ear cavity
- ⑬ Maxillary foramen
- ⑭ Infraorbital foramen



Fig. 46(a) Frontal section

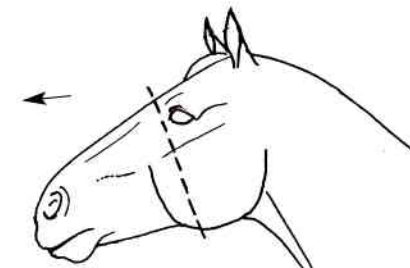


Fig. 46(c) Lateral surface projection

PARANASAL SINUSES – Various Views (Figure 47)

Fig. 47(a) and (b) Frontal and Maxillary Sinuses – Dorsal and Lateral Views and (c) Interconnections of Paranasal Sinuses – Lateral View

Label:

- A Frontal sinus
- B Maxillary sinus
- C Ventral conchal sinus
- D Dorsal conchal sinus
- E Sphenoid sinus
- F Palatine sinus

On all drawings on which they occur, identify and colour the following.

- ① Frontal sinus (conchofrontal sinus since continues into dorsal conchal sinus)
- ② Caudal maxillary sinus
- ③ Rostral maxillary sinus
- ④ Ventral conchal sinus (communicates with medial compartment of rostral maxillary sinus)
- ⑤ Dorsal conchal sinus
- ⑥ Sphenoid sinus
- ⑦ Palatine sinus
- ⑧ Frontomaxillary sinus
- ⑨ Frontomaxillary opening

- ⑩ Opening of sphenopalatine sinus into caudal maxillary sinus
- ⑪ Nasomaxillary opening

Colour in the path taken by the air travelling through the sinuses.

Fig. 47(d) Axes of Maxillary Sinuses – Lateral Surface View

To show how the approximate extent of the sinuses can be mapped from the surface using certain axes. Identify and label the following axes:

- A—A joining the rostral end of the facial crest to the infraorbital foramen
- B—B parallel to A—A and through the medial angle of the eye
- C—C from the nasoincisive notch back through the medial angle of the eye
- D—D along the length of the facial crest

Identify and colour:

- ① Maxillary sinus

Fig. 47(e) Axes of Frontal Sinuses – Dorsal Surface View

To show how the approximate extent of the sinuses can be mapped from the surface using certain axes. Identify and label the following axes:

- X—X transversely through the middle of the zygomatic arches

- Y—Y transversely midway between the medial angle of the eye and the end of the facial crest
- Z—Z obliquely longitudinally from the nasomaxillary notch back through the medial angle of the eye

Identify and colour:

- ① Frontal sinus

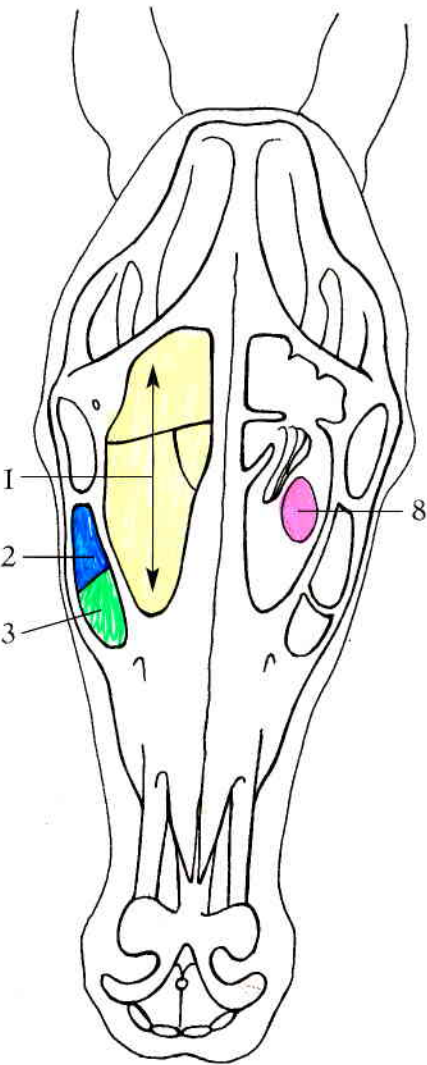


Fig. 47(a) Frontal and maxillary sinuses – dorsal view

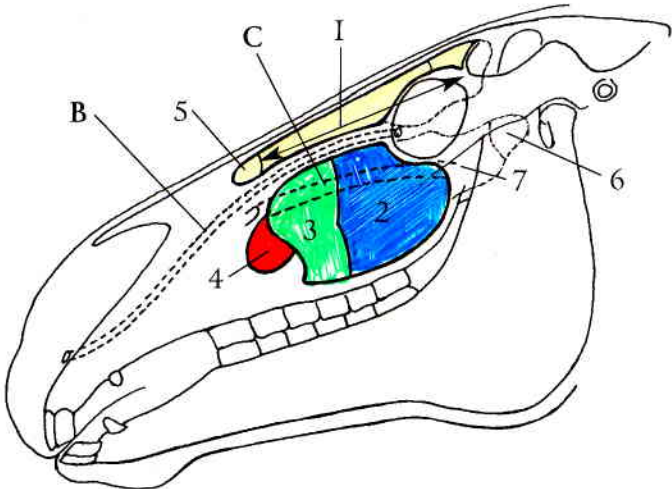


Fig. 47(b) Frontal and maxillary sinuses – lateral view

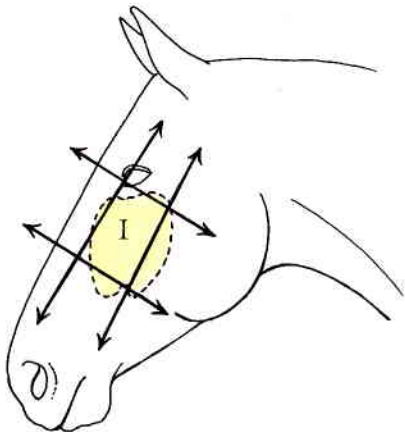


Fig. 47(d) Axes of maxillary sinuses – lateral surface view

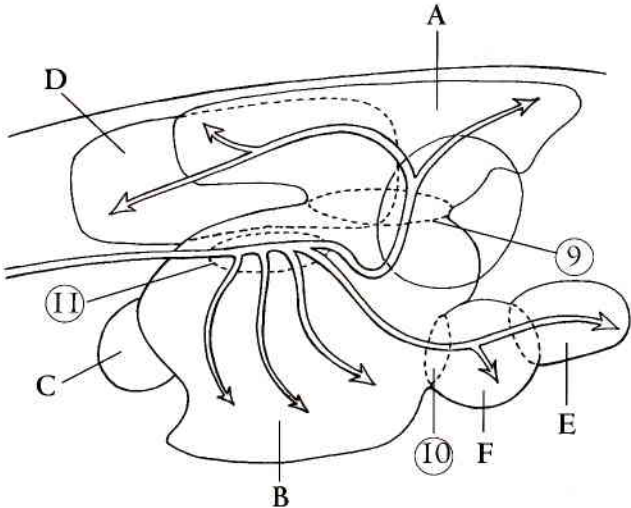


Fig. 47(c) Interconnections of paranasal sinuses – lateral view

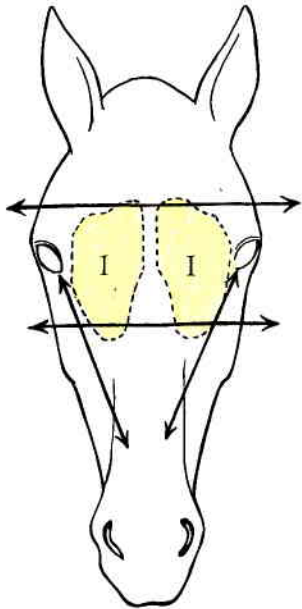


Fig. 47(e) Axes of frontal sinuses – dorsal surface view

PHARYNX AND GUTTERAL POUCHES (Figure 48)

Fig. 48(a) Nasal Cavity, Pharynx and Larynx – Surface Projection

Identify and colour:

- ① Nasal cavity
- ② Nasopharynx
- ③ Soft palate
- ④ Auditory tube
- ⑤ Middle ear cavity
- ⑥ Oropharynx
- ⑦ Oesophagus
- ⑧ External acoustic meatus (across which eardrum is stretched)

Fig. 48(b) Guttural Pouch and Auditory Tube – Lateral Surface Projection

Label:

- A Auditory tube
- B Pharyngeal opening of auditory tube
- C Position of guttural pouch opening into auditory tube
- D Median septum of guttural pouches
- E Stylohyoid bone
- F Ceratohyoid
- G Basihyoid (body of hyoid)
- H Thyrohyoid

I Epiglottic cartilage

J Thyroid cartilage

Identify and colour:

- ① Guttural pouch

Fig. 48(c) Guttural Pouches – Ventral View

Identify and colour:

- ① Right guttural pouch (with ventral wall removed)
- ② Left guttural pouch
- ③ Vagosympathetic nerve
- ④ Common carotid artery
- ⑤ Cranial laryngeal nerve
- ⑥ Medial retropharyngeal lymph node
- ⑦ Opening of auditory tube
- ⑧ Lateral compartment of guttural pouch
- ⑨ Stylohyoid bone
- ⑩ Internal carotid artery
- ⑪ External carotid artery
- ⑫ Hypoglossal nerve
- ⑬ Lingual artery

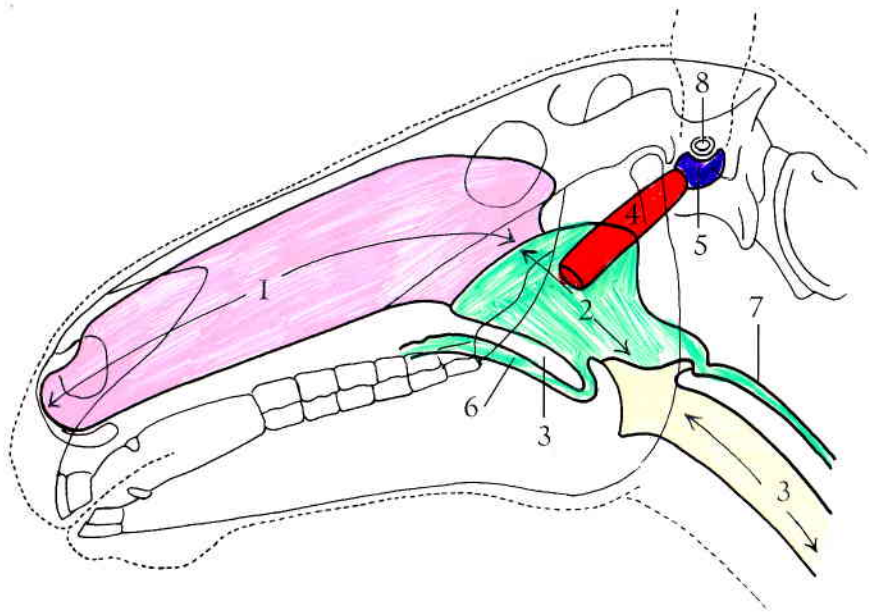


Fig. 48(a) Nasal cavity, pharynx and larynx – surface projection

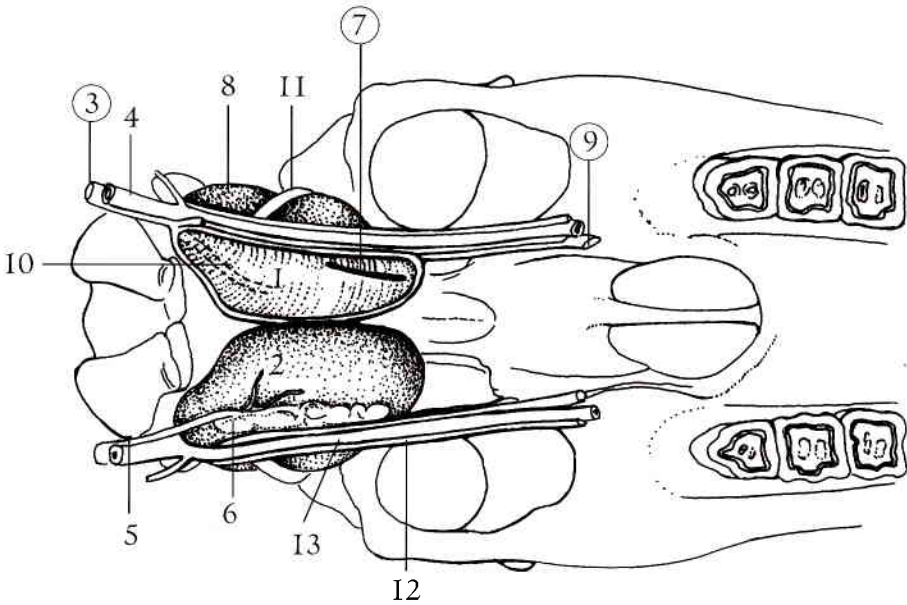


Fig. 48(c) Guttural pouches – ventral view

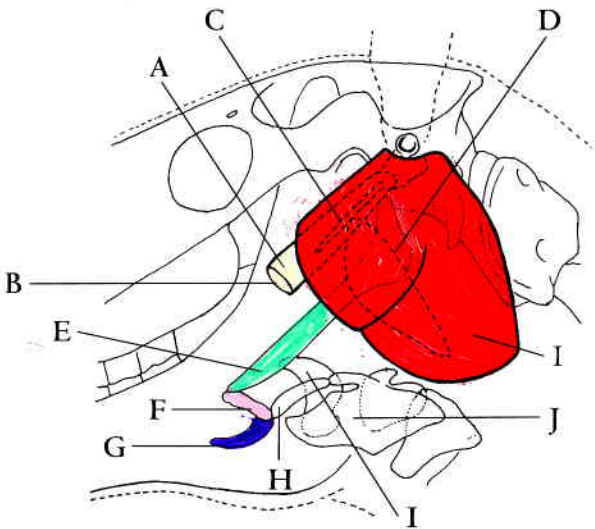


Fig. 48(b) Guttural pouch and auditory tube – lateral surface projection

THE LARYNX PART I – Breathing and Swallowing (Figure 49)

Figs. 49(a), (b) Larynx and Glottis Open for Breathing and (c), (d) Larynx and Glottis Closed for Swallowing

Label:

- A Infraglottic cavity
- B Trachea
- C Oesophagus
- D Nasopharynx
- E Guttural pouch

Identify and colour:

- ① Epiglottic cartilage
- ② Soft palate
- ③ Oropharynx
- ④ Basihyoid bone
- ⑤ Laryngeal prominence of thyroid
- ⑥ Intraparyngeal opening
- ⑦ Hyoepiglottic joint (hyoepiglottic ligament)
- ⑧ Root of tongue
- ⑨ Genioglossal muscle
- ⑩ Corniculate process of arytenoid cartilage (dorsal)
- ⑪ Vocal fold ('true' vocal fold covering vocal ligament and muscle)

- ⑫ Vestibular fold ('false' vocal fold covering vestibular ligament, ventricular muscle and cuneiform cartilage)
- ⑬ Pharyngeal constrictor muscles
- ⑭ Sternohyoid muscle
- ⑮ Geniohyoid muscle
- ⑯ Hyoglossal muscle
- ⑰ Arytenoid cartilage (hyaline with elastic processes)
- ⑱ Glottis
- ⑲ Median laryngeal ventricle



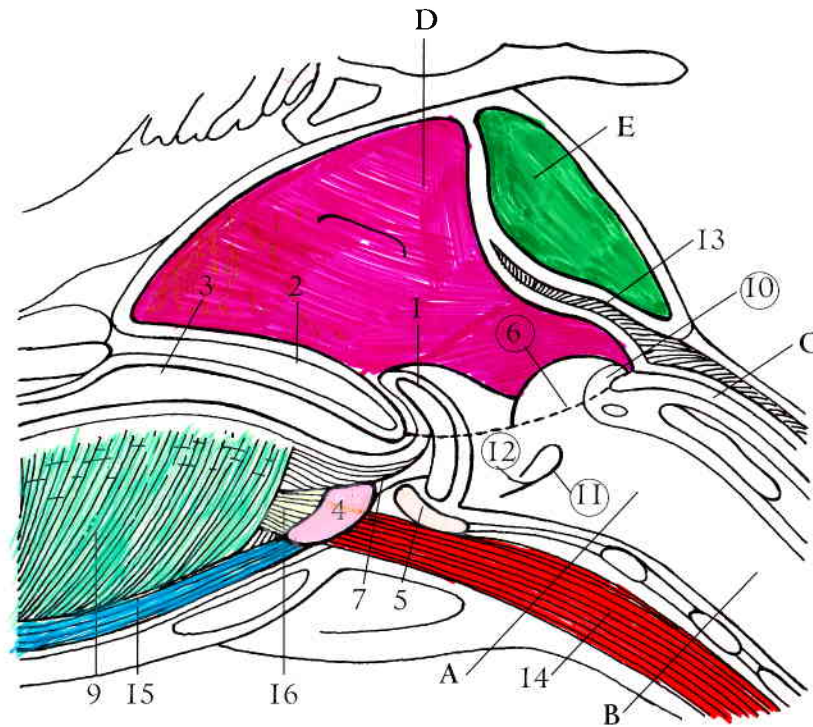


Fig. 49(a) Larynx open for breathing – median section

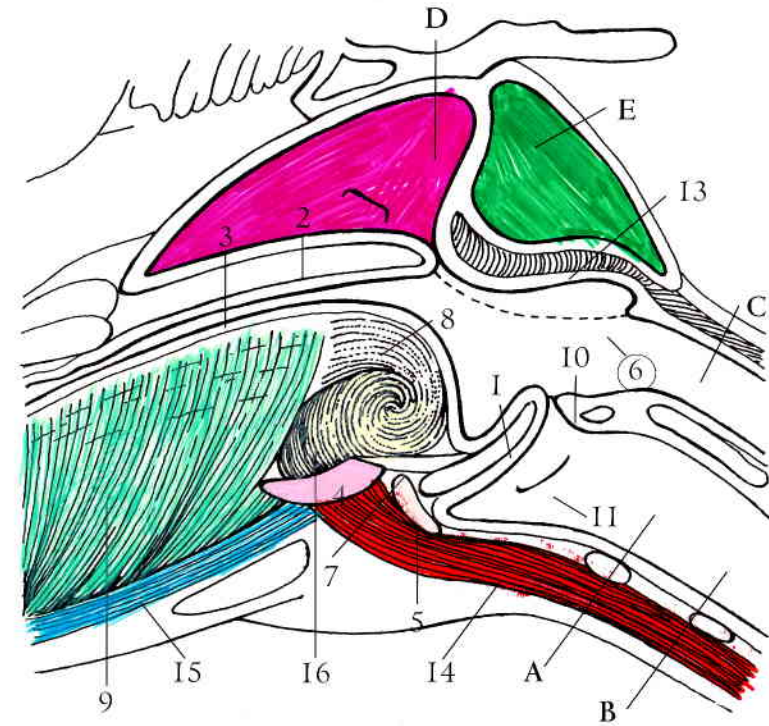


Fig. 49(c) Larynx closed for swallowing – median section

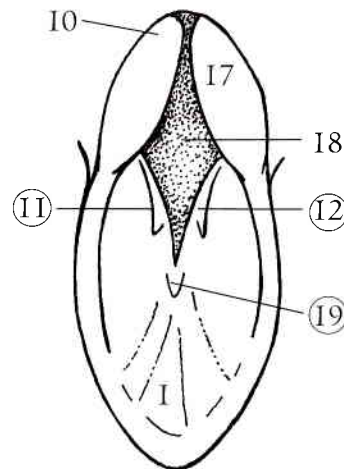


Fig. 49(b) Larynx with glottis open – rostral view

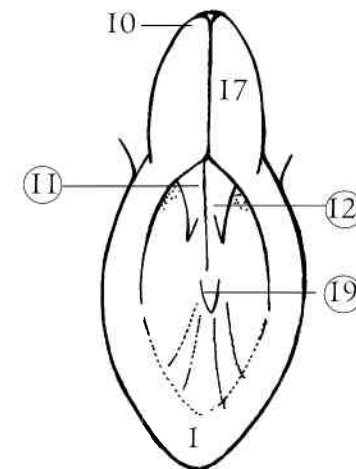


Fig. 49(d) Larynx with glottis closed – rostral view

THE LARYNX PART 2 – Hyoid Apparatus and Lateral Cartilages (Figure 50)

On all of the drawings on which they appear, label the following:

- A Rostral horn of thyroid cartilage
- B Corniculate process of arytenoid cartilage
- C Cuneiform process of epiglottic cartilage
- D Thyroid fissure (transmitting cranial laryngeal nerve)
- E Laryngeal prominence of thyroid
- F Entrance into laryngeal ventricle
- G Vocal fold
- H Trachea
- I Apex of epiglottis
- J Vestibular fold

On all of the drawings on which they appear, identify and colour the following.

- ① Stylohyoid bone
- ② Ceratohyoid bone
- ③ Lingual process of basihyoid in root of tongue
- ④ Thyrohyoid bone
- ⑤ Epiglottic cartilage (elastic)
- ⑥ Lamina of thyroid cartilage
- ⑦ Arytenoid cartilage
- ⑧ Lamina of cricoid cartilage
- ⑨ Tracheal cartilage

- ⑩ Dorsal cricoarytenoid muscle (glottic dilator abducting vocal folds to open glottis)
- ⑪ Cricothyroid muscle (glottic sphincter tensing and adducting vocal folds)
- ⑫ Thyrohyoid muscle
- ⑬ Ceratohyoid muscle
- ⑭ Transverse arytenoid muscle (glottic sphincter adducting vocal cords to close glottis)
- ⑮ Ventricular muscle (associated with vestibular ligament in vestibular fold: glottic sphincter adducting vestibular folds to close glottis)
- ⑯ Vocal muscle (associated with vocal ligament in vocal fold, forming a glottic sphincter adducting vocal folds to close glottis)
- ⑰ Cricotracheal ligament (annular band of fibro-elastic tissue)
- ⑱ Lateral laryngeal ventricle
- ⑲ Cricothyroid membrane (closing caudal notch of thyroid)
- ⑳ Hyoepiglottic joint (hyoepiglottic ligament)
- ㉑ Vestibular ligament
- ㉒ Thyrohyoid membrane

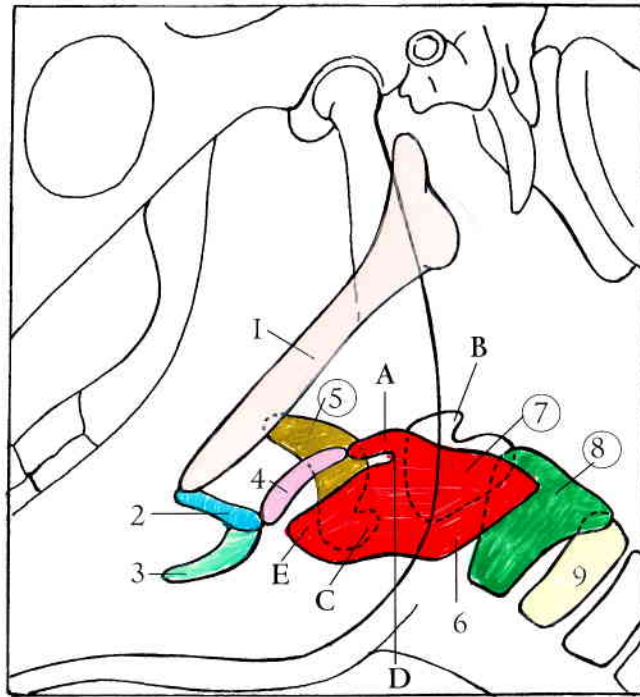


Fig. 50(a) Hyoid apparatus and laryngeal cartilages – lateral surface projection

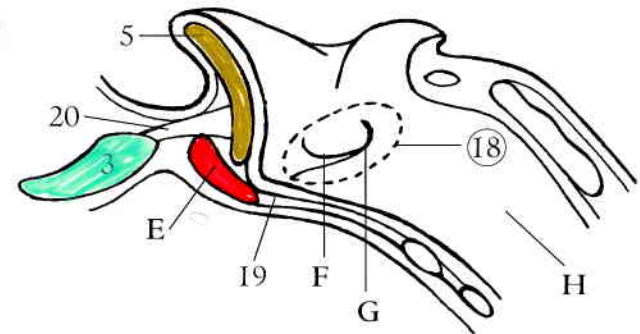


Fig. 50(d) Larynx in median section

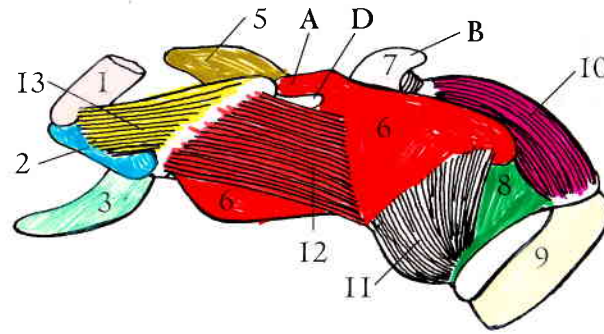


Fig. 50(b) Laryngeal cartilages and muscles – lateral view I

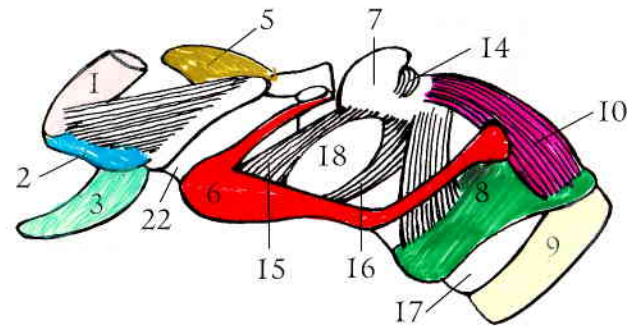


Fig. 50(c) Laryngeal cartilages and muscles – lateral view 2

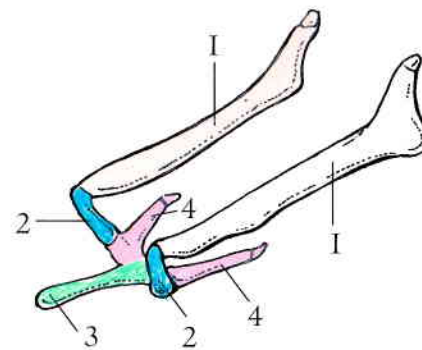


Fig. 50(e) Hyoid apparatus

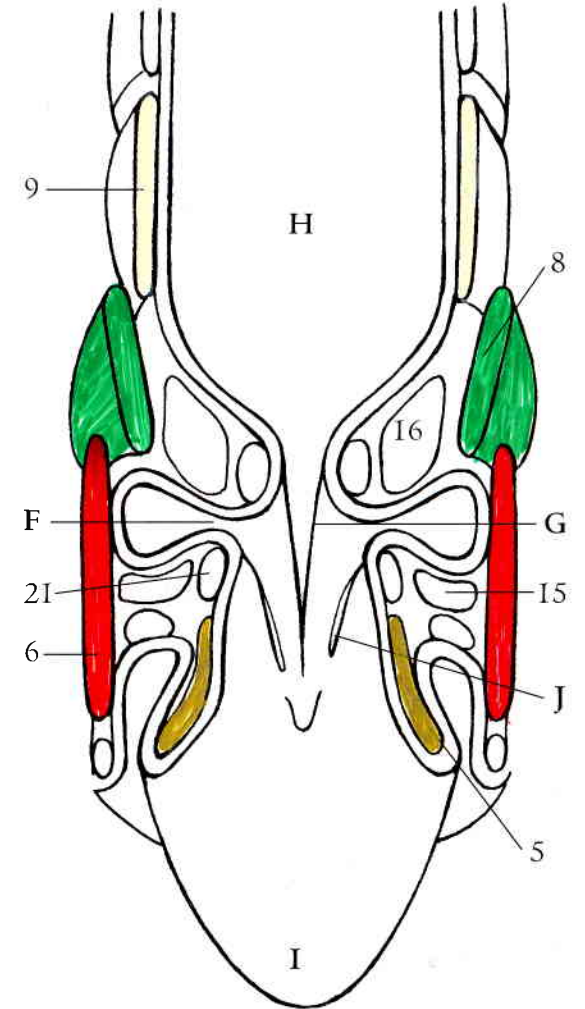


Fig. 50(f) Larynx in horizontal section – dorsal view

THE TONGUE AND SALIVARY GLANDS (Figure 51)

Fig. 51(a) Tongue, Palate and Larynx – Dorsal View

Label:

- A Apex of tongue (free and spatula-shaped)
- B Body of tongue (related below to mylohyoid and geniohyoid muscles)
- C Root of tongue (attached to hyoid and merging on either side with oropharyngeal wall)
- D Oropharynx (opened)
- E Oesophagus
- F Oral vestibule

Identify and colour:

- ① Stylohyoid bone
- ② Nasopharynx (roof cut in midline and pulled to one side)
- ③ Palatopharyngeal arch (caudal pillar of soft palate)
- ④ Corniculate process of arytenoid cartilage (mucosal covering dotted with lymph nodules)
- ⑤ Glottis (bounded by vocal cords and mucous membrane covering arytenoid cartilages)
- ⑥ Vocal fold
- ⑦ Aryepiglottic fold

- ⑧ Soft palate (oropharyngeal roof cut through in midline)
- ⑨ Lingual tonsil
- ⑩ Vallate papillae
- ⑪ Foliate papillae
- ⑫ Epiglottis

Fig. 51(b) Salivary Glands – Lateral Surface Projection

Label:

- A Opening of parotid duct (into oral vestibule through cheek lateral to upper cheek tooth 3)
- B Mandibular duct opening (at rostral end of oral cavity)

Identify and colour:

- ① Stylohyoid bone
- ② Dorsal buccal salivary glands (in cheek on outer surface of buccinator muscle)
- ③ Ventral buccal salivary glands (in submucous tissue at lower border of buccinator muscle)
- ④ Sublingual salivary gland (polystomatic, diffuse part beneath oral mucosa in sublingual fold alongside mandibular duct: opening separately in floor of mouth through about 30 minute papillae)
- ⑤ Parotid salivary gland
- ⑥ Mandibular salivary gland (seromucous)
- ⑦ Parotid salivary duct
- ⑧ Mandibular salivary duct

Fig. 51(c) Hyoid Apparatus and Tongue

Label:

- A Apex of tongue
- B Body of tongue
- C Root of tongue

Identify and colour:

- ① Stylohyoid bone
- ② Occipitohyoid muscle
- ③ Stylohyoid muscle
- ④ Thyrohyoid muscle
- ⑤ Sternohyoid muscle
- ⑥ Ceratohyoid muscle
- ⑦ Hyoglossal muscle
- ⑧ Mylohyoid muscle
- ⑨ Geniohyoid muscle
- ⑩ Styloglossal muscle
- ⑪ Palatine mucosa (thickened, keratinized and ridged, producing palatine rugae)
- ⑫ Mucosa of tongue (filiform and fungiform papillae)

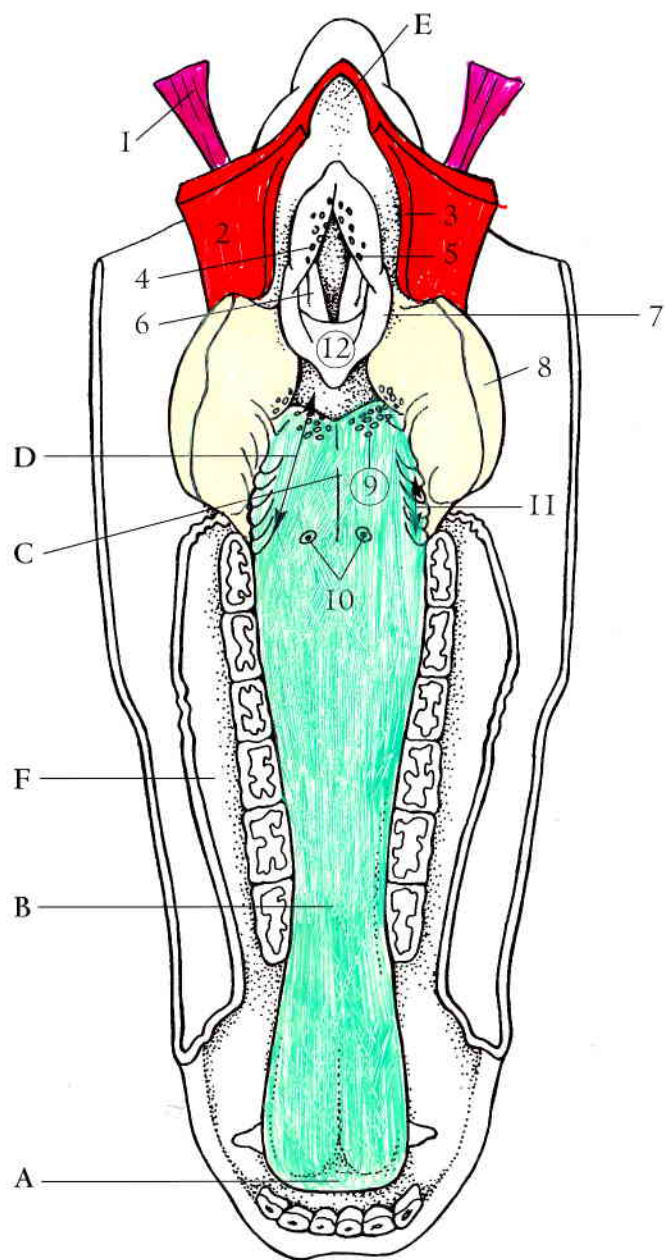


Fig. 51(a) Tongue, palate and larynx – dorsal view

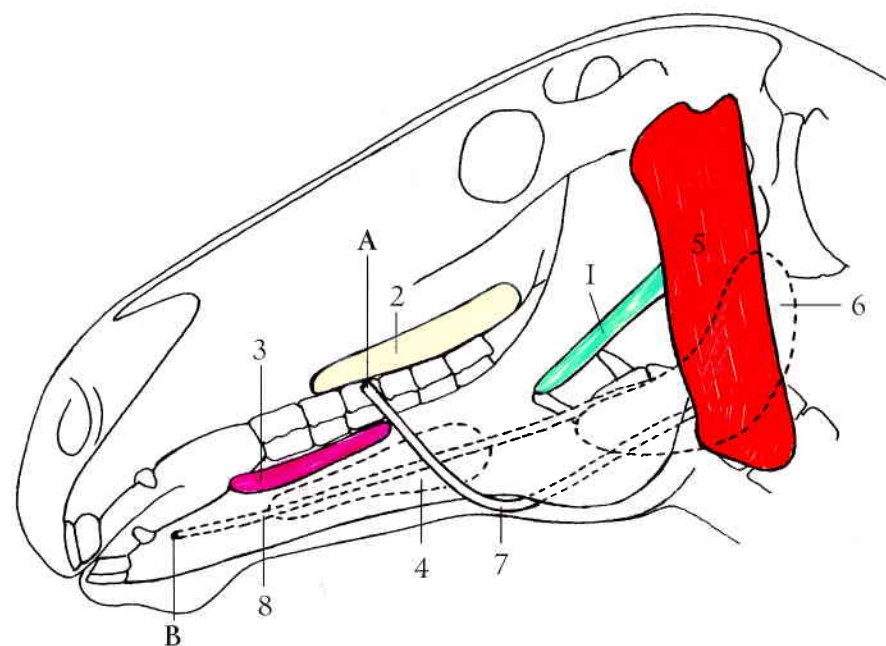


Fig. 51(b) Salivary glands – lateral surface projection

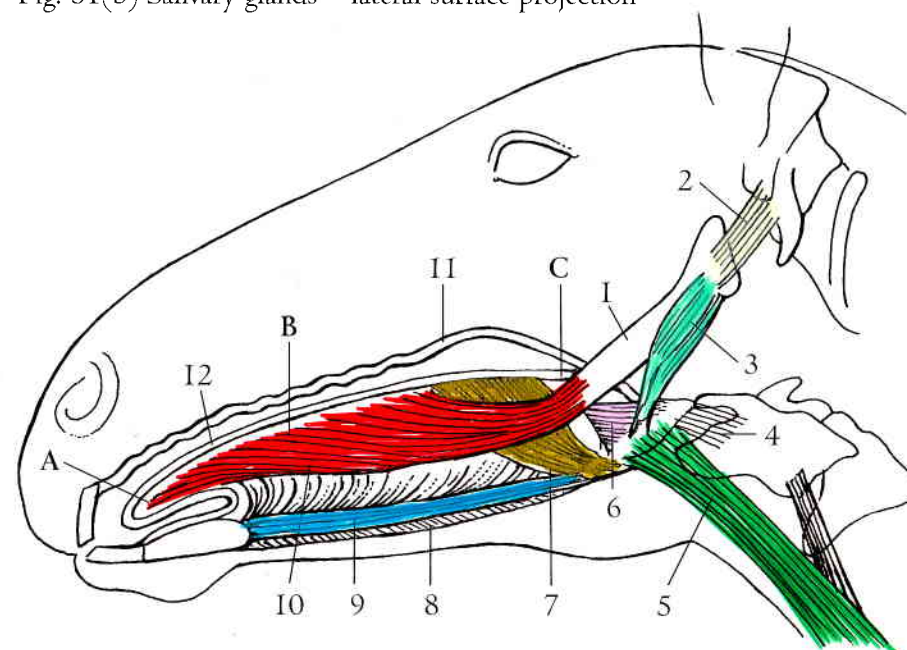


Fig. 51(c) Hyoid apparatus and tongue

IMPLANTATION OF CHEEK TEETH AND MAXILLARY SINUS AT VARIOUS AGES

(Figure 52)

The four drawings show lateral views at ages 2/3, 5, 10 and 20 years. On all appropriate drawings, identify and label:

Deciduous premolars DPI, DP2, DP3

Premolars P2, P3, P4

Molars MI, M2, M3

Identify and colour:

- ① Rostral maxillary sinus
- ② Caudal maxillary sinus

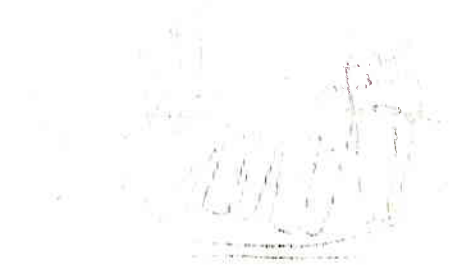


FIGURE 52



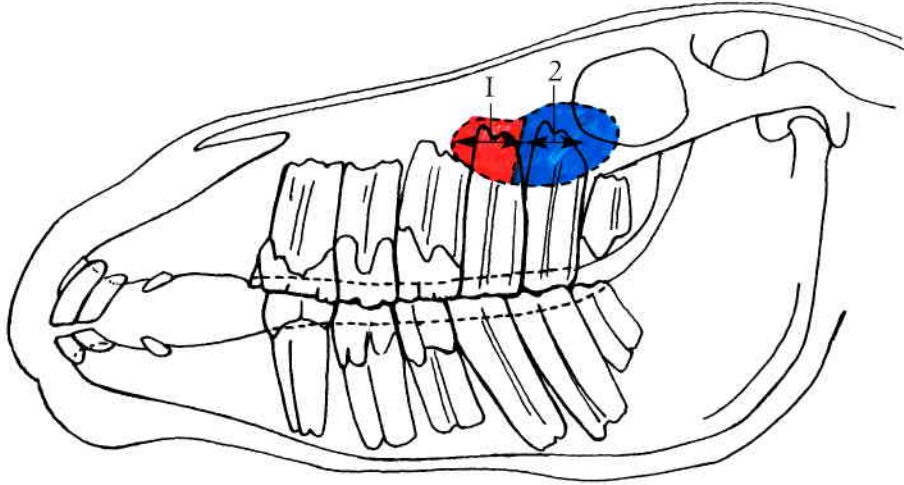


Fig. 52(a) 2/3 years old

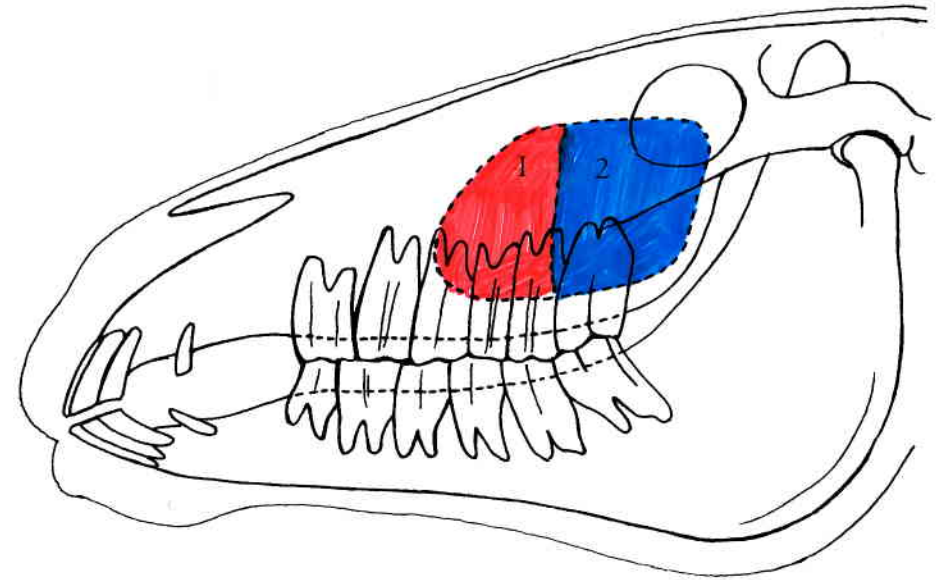


Fig. 52(c) 10 years old

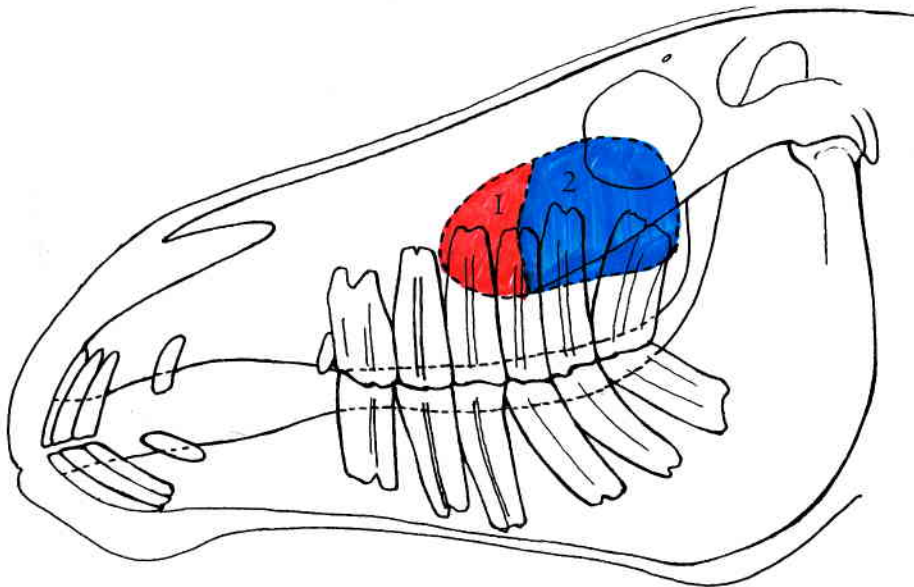


Fig. 52(b) 5 years old

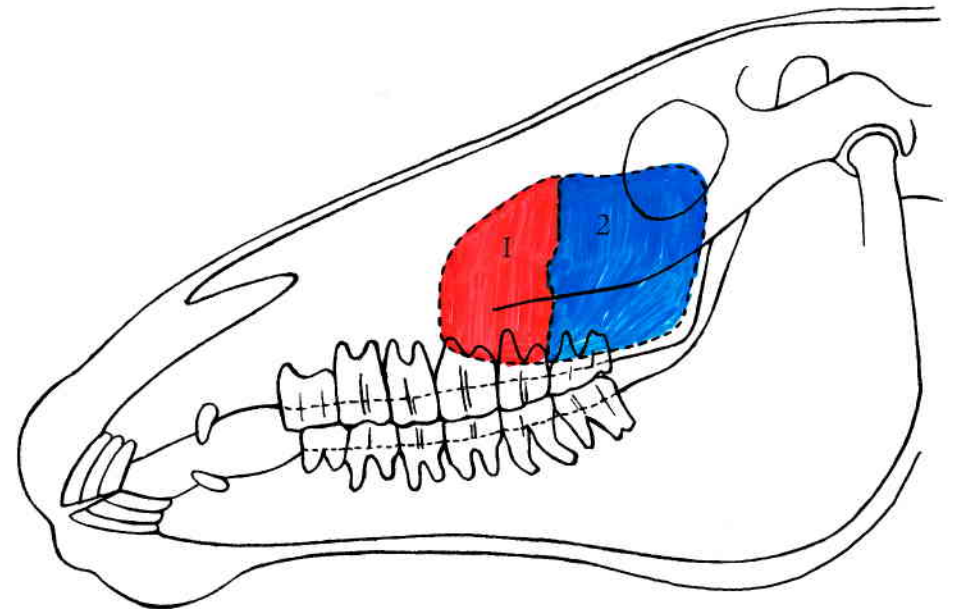


Fig. 52(d) 20 years old

CHEEK TEETH; CENTRAL INCISOR AND ESTIMATION OF AGE – Part I (Figure 53)

Figs. 53(a) and (b) Upper and Lower Dental Arcades – Plan Views

On both drawings, label:

- A Incisor teeth
- B Premolar teeth
- C Molar Teeth

On both drawings, identify and colour:

- (I1) Central incisor tooth
- (I2) Intermediate incisor tooth
- (I3) Corner incisor tooth
- (C) Canine tooth (rudimentary and only erupt in stallions)
- (P2) 1st cheek tooth (P1 of upper dental arch – wolf tooth – often absent)
- (P3) 2nd cheek tooth
- (P4) 3rd cheek tooth
- (M1) 4th cheek tooth
- (M2) 5th cheek tooth
- (M3) 6th cheek tooth

Fig. 53(c) Central Incisor – Longitudinal and Transverse Sections

Label:

- A Crown
- B Root
- C Root canal (entry into pulp cavity, constricted as root forms)

Identify and colour:

- (1) Infundibulum ('cup': central depression in tooth table)
- (2) Remains of infundibulum ('mark': central depression occupied initially by central cement and subsequently by central enamel only)
- (3) Peripheral cement (covering entire crown and root: providing attachment for fibres of periodontal membrane holding tooth in socket)
- (4) Central cement (lining infundibulum: continuous with peripheral cement over unworn tooth table)
- (5) Peripheral enamel (hard crystalline surface coating over entire tooth)
- (6) Central enamel (infolded enamel producing infundibulum)
- (7) Dentine (bone-like substance forming bulk of tooth)
- (8) Pulp cavity containing nerves and blood vessels of tooth (dental pulp)
- (9) 'Dental star' (secondary dentine deposited in pulp cavity)

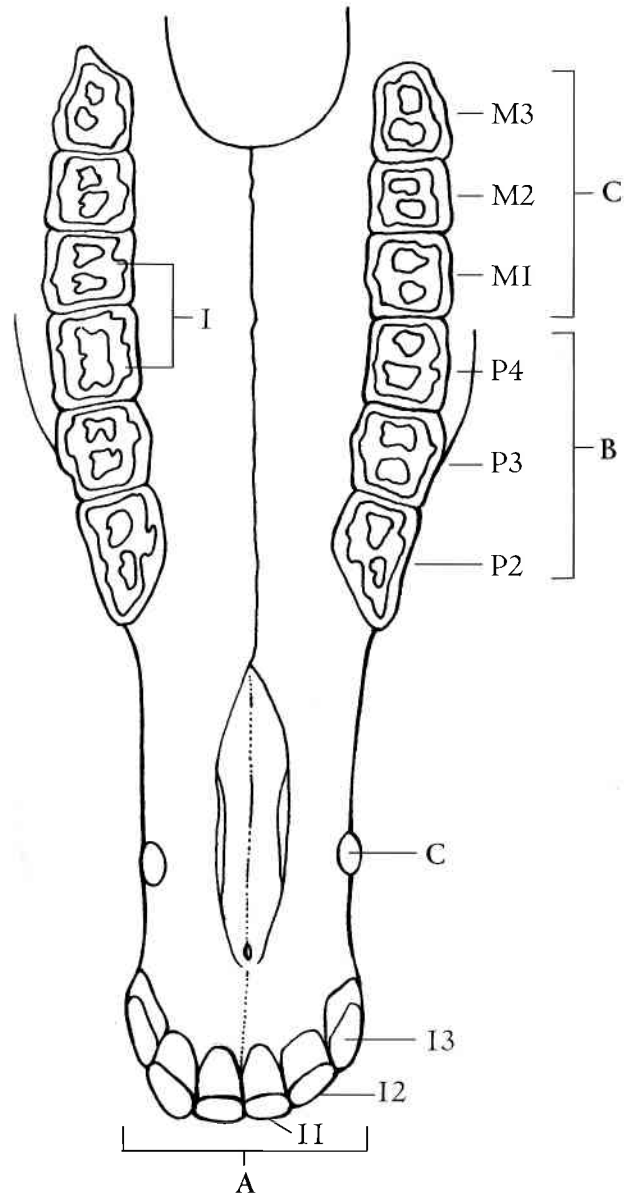


Fig. 53(a) Upper dental arcade – plan view

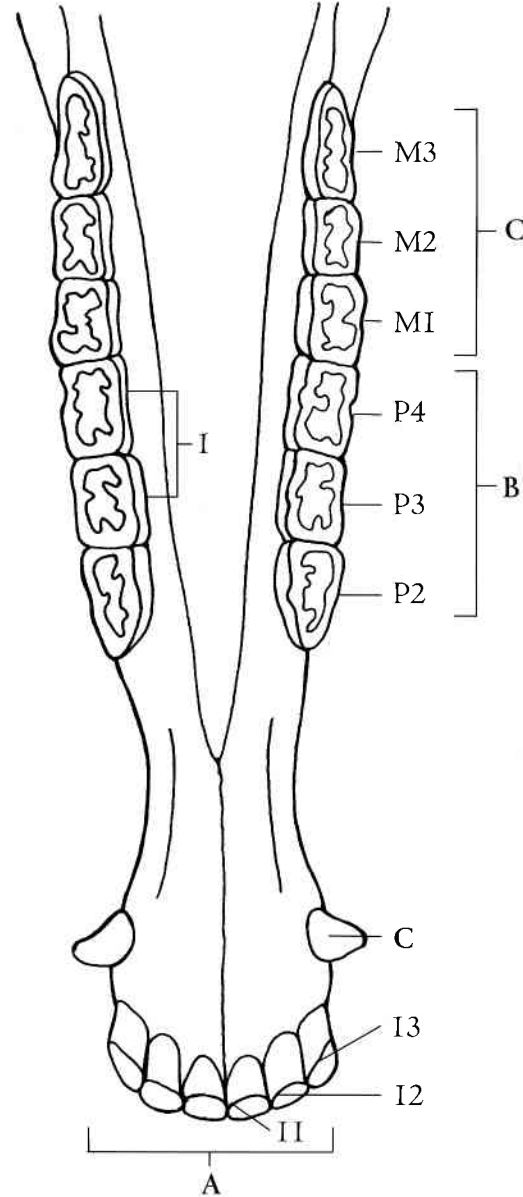


Fig. 53(b) Lower dental arcade – plan view

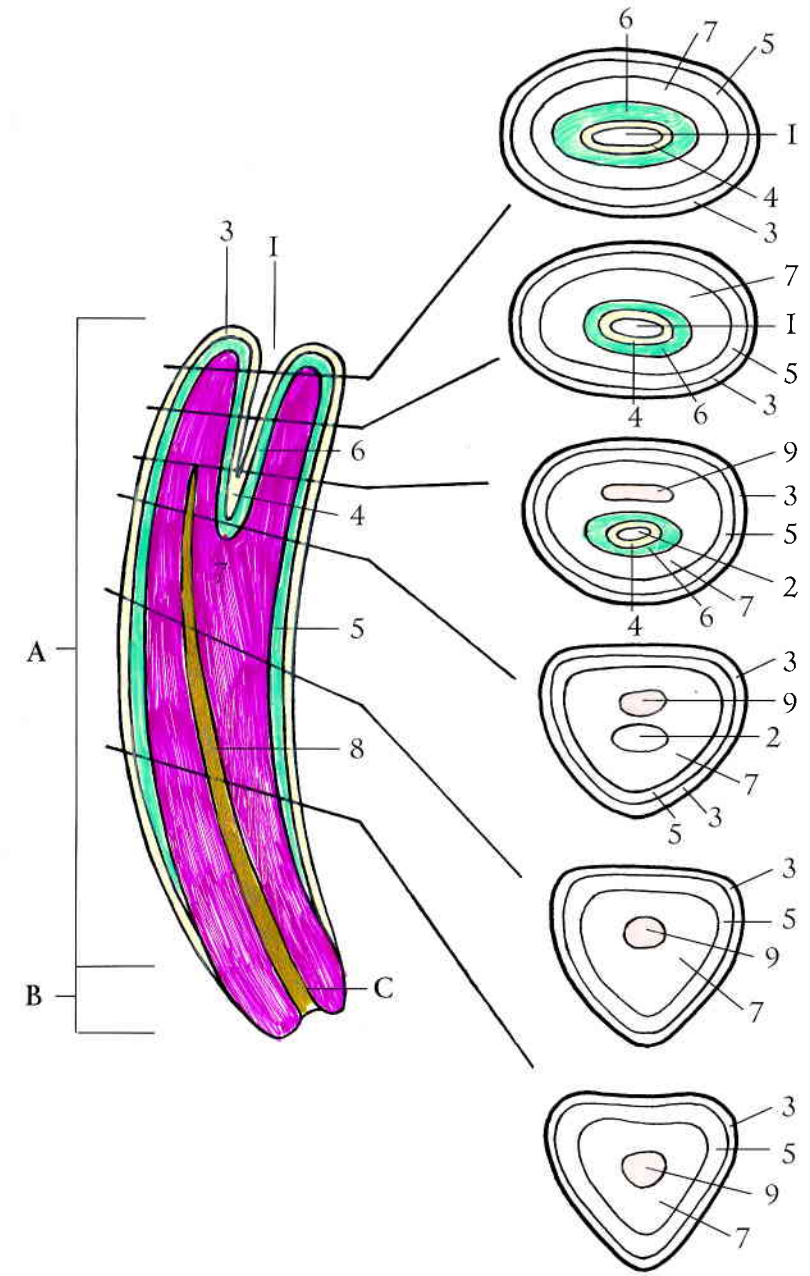


Fig. 53(c) Central incisor tooth – longitudinal and transverse sections

INCISOR TEETH AND ESTIMATION OF AGE – Part 2 (Figure 54)

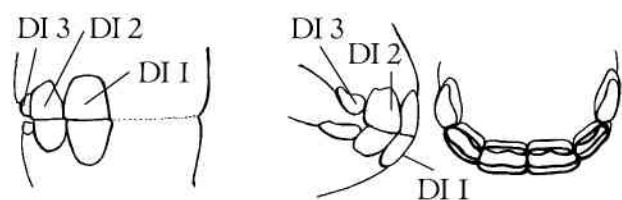
Series of drawings showing incisor teeth of horses of varying ages. Each set of drawings shows, from left to right, (i) incisor teeth from in front, (ii) from the right and (iii) a plan view of the tables of the lower incisors.

Label:

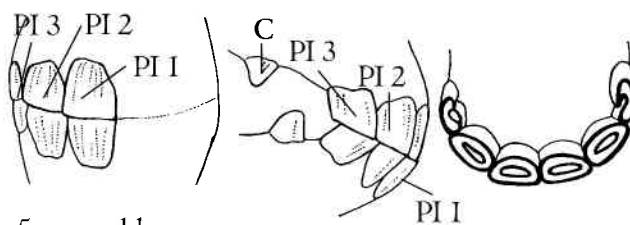
- A Seven-year hook
- B Nine-year hook
- C Galvayne's groove

On each drawing, complete the tooth plan from the front and, referring to Figure 53, identify and colour:

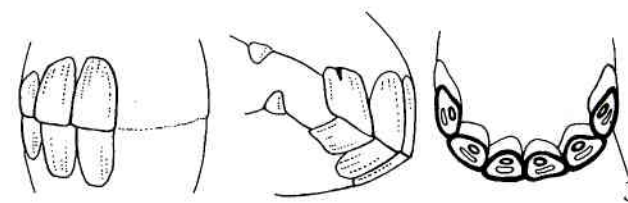
- Ⓓ₁₁ Central temporary (or deciduous) incisor
- Ⓓ₁₂ Intermediate temporary incisor
- Ⓓ₁₃ Corner temporary incisor
- ⒫₁₁ Central permanent incisor
- ⒫₁₂ Intermediate permanent incisor
- ⒫₁₃ Corner temporary incisor
- Ⓒ Canine
- Ⓘ Cup
- ② Mark
- ③ Dental star



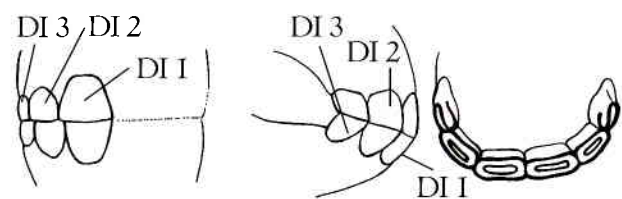
1 year old



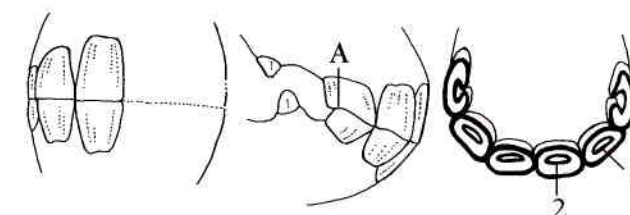
5 years old



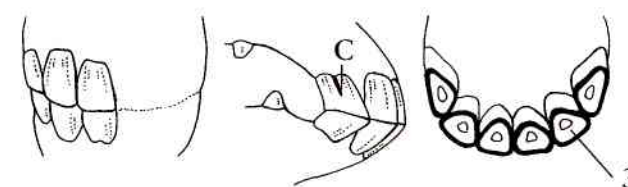
10 years old



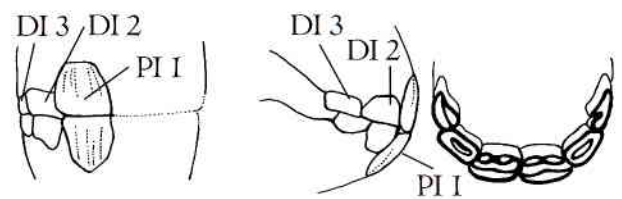
2 years old



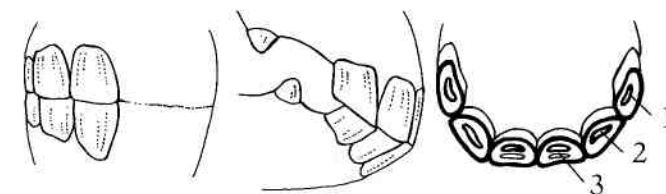
7 years old



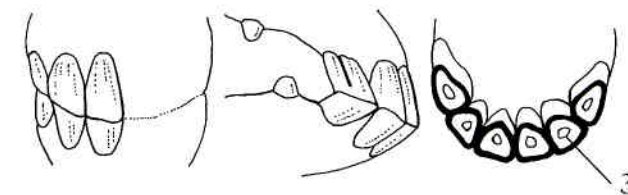
15 years old



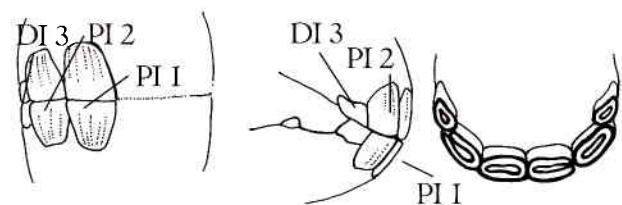
3 years old



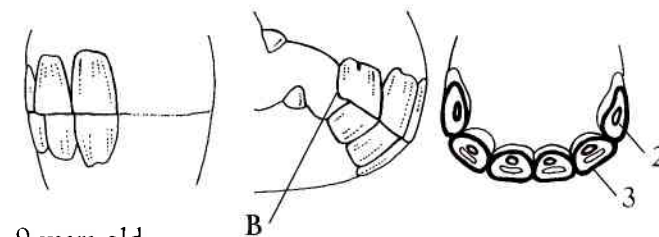
8 years old



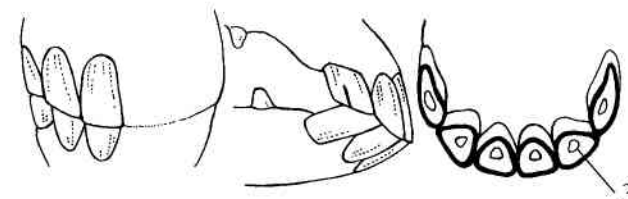
19-20 years old



4 years old



9 years old



20-25 years old

BLOOD VESSELS IN THE HEAD – Lateral Views

(Figure 55)

Fig. 55(a) Arteries

Identify the following and colour-match the numbered circles with those on the drawing. Colour all the arteries red.

- ① Common carotid artery
- ② External carotid artery
- ③ Linguofacial trunk
- ④ Carotid body (slightly swollen initial part of internal carotid artery containing stretch receptors responsive to changes in blood pressure)
- ⑤ Occipital artery
- ⑥ Lingual and sublingual arteries
- ⑦ Facial artery
- ⑧ Buccal artery
- ⑨ Mandibular (inferior) alveolar artery
- ⑩ Mandibular and maxillary labial arteries
- ⑪ Mental artery
- ⑫ Dorsal and lateral nasal arteries
- ⑬ Angularis oculi artery
- ⑭ Infraorbital artery
- ⑮ External ethmoidal artery
- ⑯ Malar artery
- ⑰ External ophthalmic artery
- ⑱ Rostral and caudal deep temporal arteries
- ⑲ Supraorbital arteries

- ⑳ Rostral, lateral and caudal auricular arteries
- ㉑ Maxillary artery
- ㉒ Superficial temporal artery
- ㉓ Internal carotid artery (to brain)
- ㉔ Vertebral artery

Fig. 55(b) Veins

Identify the following and colour-match the numbered circles with those on the drawing. Colour all the veins blue.

- ① External jugular vein
- ② Linguofacial vein
- ③ Occipital vein
- ④ Vertebral/occipital vein anastomosis
- ⑤ Vertebral vein
- ⑥ Superficial temporal vein
- ⑦ Rostral, middle and caudal auricular veins
- ⑧ Transverse facial vein
- ⑨ Maxillary vein
- ⑩ Deep temporal veins
- ⑪ Supraorbital vein
- ⑫ Angular vein of eye
- ⑬ Infraorbital vein
- ⑭ Sinus of transverse facial vein
- ⑮ Sinus of deep facial vein
- ⑯ Sinus of buccal vein
- ⑰ Masseteric veins
- ⑱ Lateral branch of buccal vein
- ⑲ Lingual and sublingual veins

- ㉒ Deep facial vein
- ㉓ Mandibular (inferior) and maxillary (superior) labial veins
- ㉔ Mandibular alveolar vein
- ㉕ Mental vein
- ㉖ Dorsal and lateral nasal veins

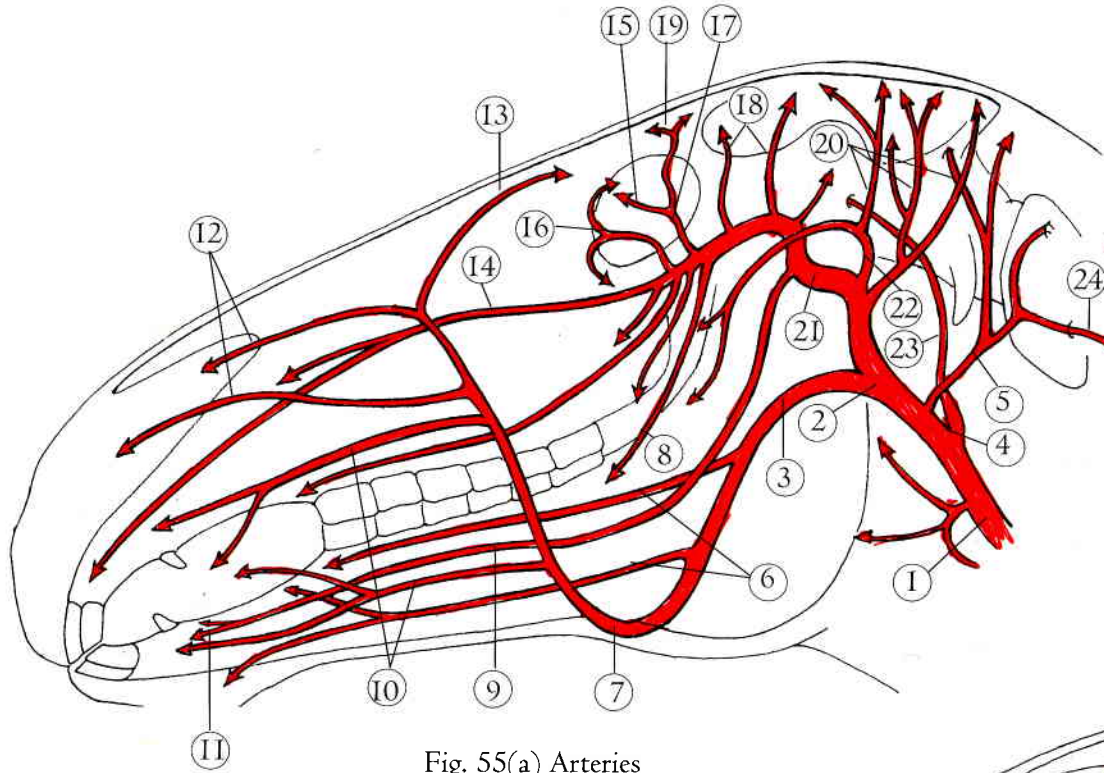


Fig. 55(a) Arteries

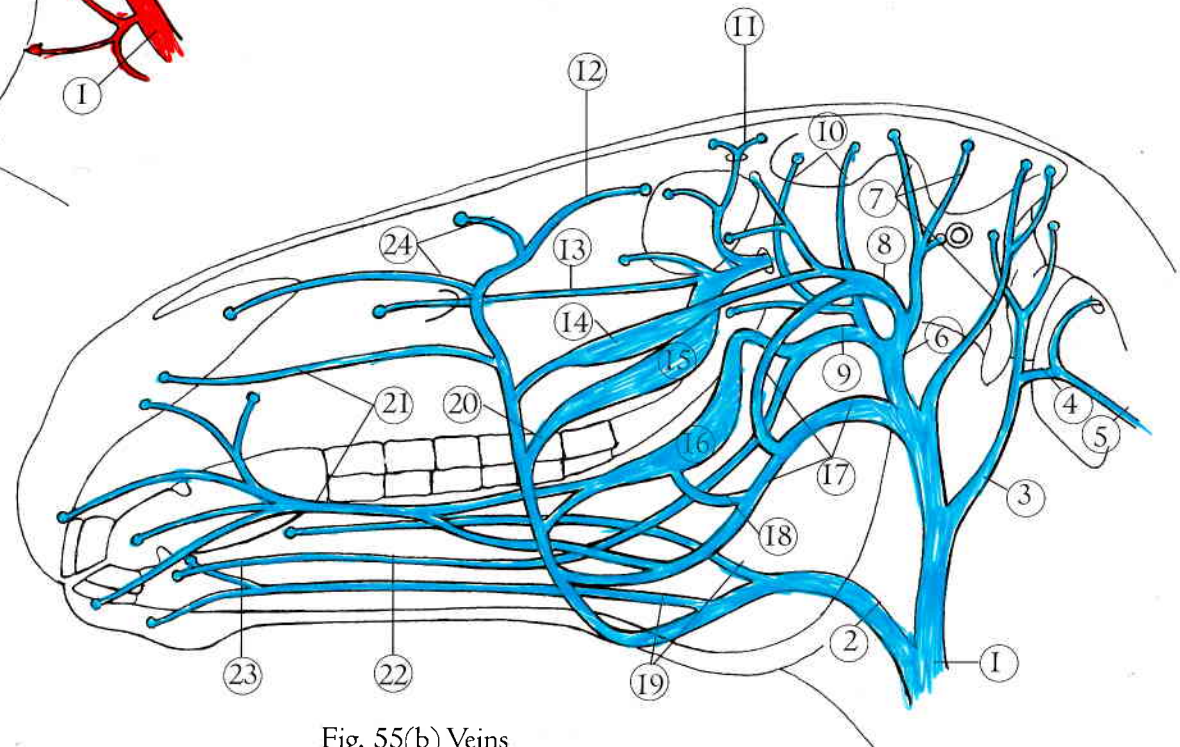


Fig. 55(b) Veins

PART 7 – *The Foot*

FIVE VIEWS OF THE FOOT

(Figure 56)

On the drawings on which they occur, label:

- A Coronet
- B Wall
- C Bulbs of the heels
- D Collateral groove
- E Bar
- F Sole
- G Frog
- H Central groove of frog
- I Apex of frog

phalanx underlying wall of hoof and supporting sensitive laminae interleaving with insensitive laminae of wall)

- ⑨ Corium of sole (dermis underlying sole, producing tubular and intertubular horn of sole)
- ⑩ Perioplic corium (dermis underlying periople)
- ⑪ Long pastern bone
- ⑫ Short pastern bone
- ⑬ Pedal bone
- ⑭ Navicular bone
- ⑮ Lateral cartilage

Identify and colour:

- ① Toe
- ② Quarter
- ③ Heel
- ④ Periople (outer waterproofing layer of hoof wall)
- ⑤ White line (layer of pale horn joining wall and sole)
- ⑥ Corium of frog (dermis underlying frog, producing tubular and intertubular horn)
- ⑦ Coronary corium
- ⑧ Laminar corium (dermis on surface of 3rd

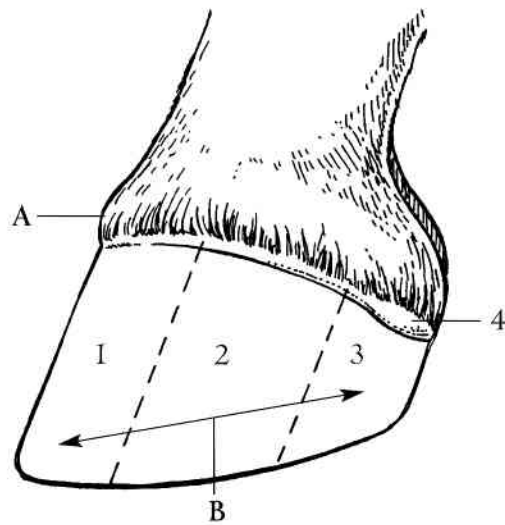


Fig. 56(a) Hoof – lateral view

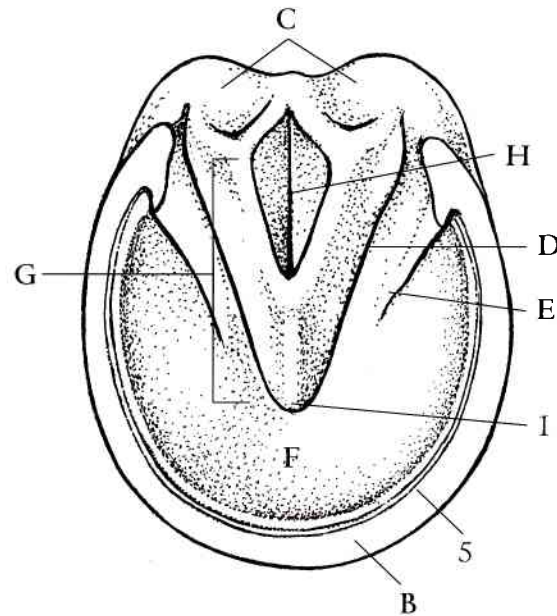


Fig. 56(b) Sole surface

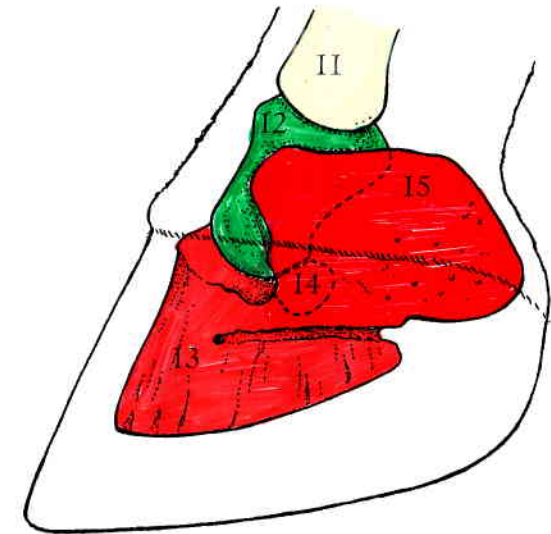


Fig. 56(c) Bones of the foot – lateral view

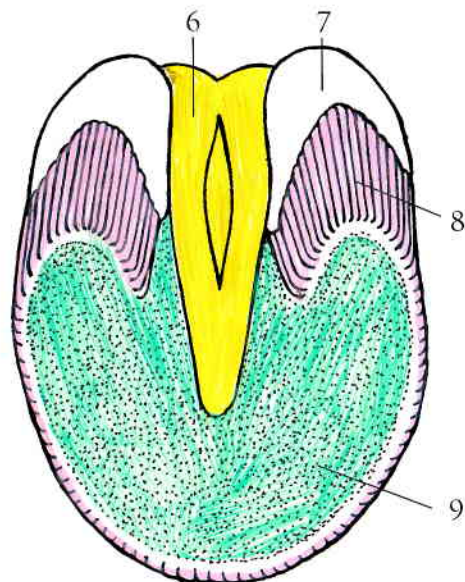


Fig. 56(d) Sole surface of the corium after removal of hoof

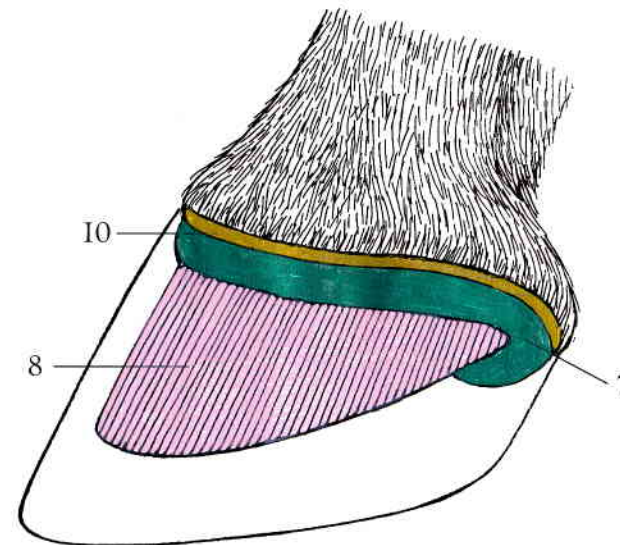


Fig. 56(e) Corium – lateral view

THE FOOT – Vertical, Axial and Transverse Sections

(Figure 57)

⑱ Lateral cartilage of 3rd phalanx

⑲ White line

On the drawings on which they occur, label:

- A 1st phalanx
- B 2nd phalanx
- C 3rd phalanx
- D Distal sesamoid (navicular) bone

Identify and colour:

- ① Common digital extensor tendon
- ② Perioplic corium
- ③ Laminar corium
- ④ Corium of frog
- ⑤ Corium of sole
- ⑥ Digital (palmar/plantar) cushion
- ⑦ Distal navicular ligament
- ⑧ Suspensory ligament of navicular bone
- ⑨ Deep digital flexor tendon
- ⑩ Distal sesamoidean ligament
- ⑪ Distal digital annular ligament
- ⑫ Navicular synovial bursa
- ⑬ Synovial cavity of coffin joint
- ⑭ Synovial cavity of pastern joint
- ⑮ Digital synovial tendon sheath
- ⑯ Coffin joint capsule
- ⑰ Periople



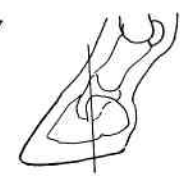


Fig. 57(a) Vertical section

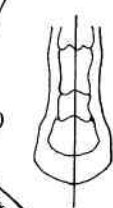


Fig. 57(b) Axial section

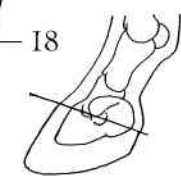


Fig. 57(c) Transverse section at level of coronet



Fig. 57(d) Coronet to ground in transverse section

PART 8 – Viscera

THE THORAX AND ITS VISCERA (Figure 58)

Figs. 58(a) Thorax in Transverse Section and (b) Lung, Thoracic and Pleural Cavities in Lateral Surface Section

(The small drawing shows the orientation of the main drawings.)

On the two main drawings, as appropriate, label:

- A Thoracic inlet
- B 1st rib
- C 18th (last) rib
- D Mediastinum (midline connective tissue partition dividing thoracic cavity into half)
- E Principal bronchus
- F Dorsal border of lung
- G Apical lobe of lung
- H Costal surface of lung
- I Diaphragmatic surface of lung
- J Ventral border of lung
- K Visceral pericardium (epicardium on surface of heart)
- L Parietal pericardium

Identify and colour:

- ① Supraspinous ligament
- ② Thoracic vertebra and longus thoracis muscles (roof of thoracic cavity)
- ③ Ribs and intercostal muscles (wall of thoracic cavity)
- ④ Lungs
- ⑤ Thoracic aorta
- ⑥ Azygos vein
- ⑦ Oesophagus
- ⑧ Tracheal bifurcation
- ⑨ Heart in pericardium
- ⑩ Sternum and transverse thoracic muscles (floor of thoracic cavity)
- ⑪ Connective tissue of mediastinum
- ⑫ Contour of diaphragm

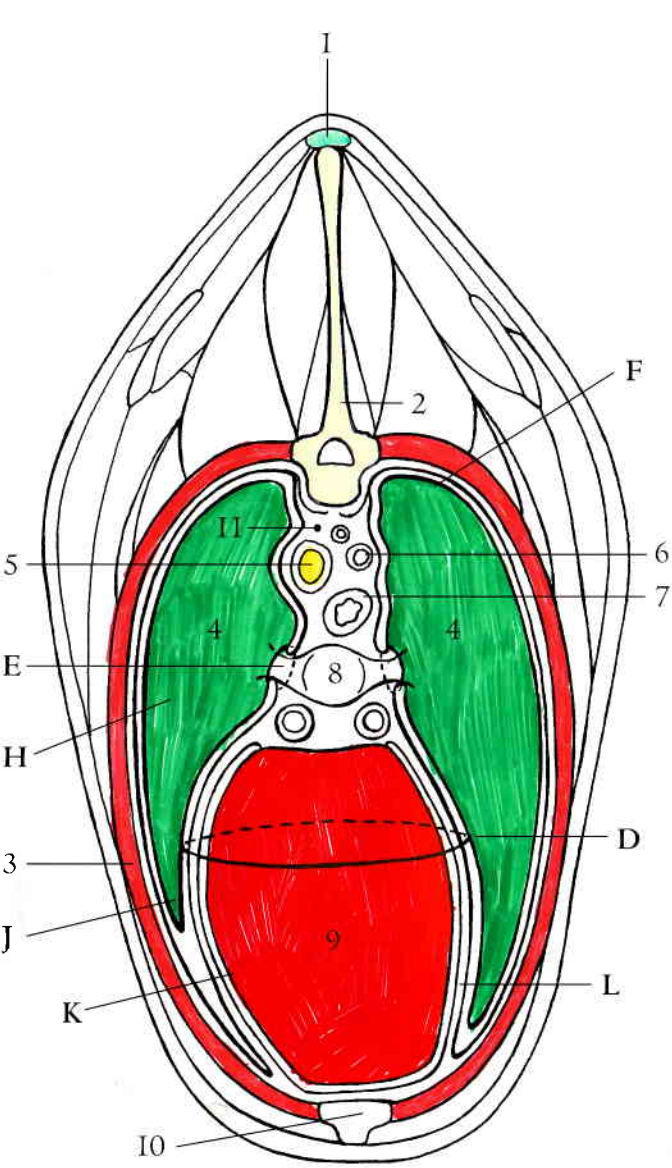


Fig. 58(a) Thorax in transverse section

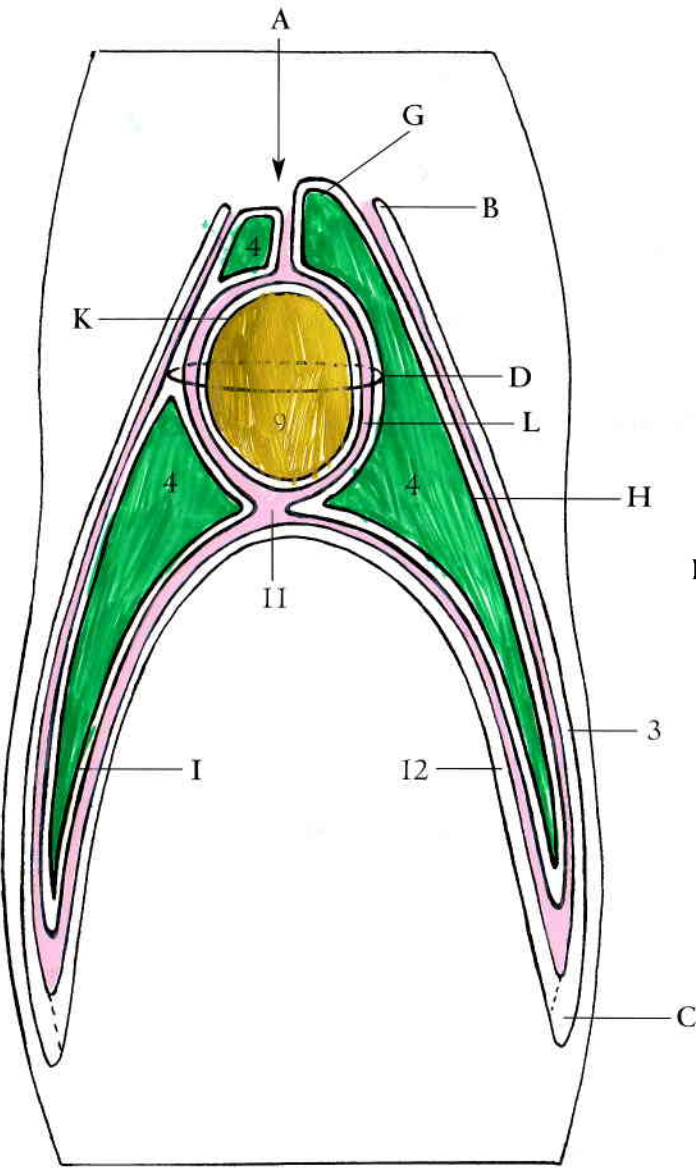
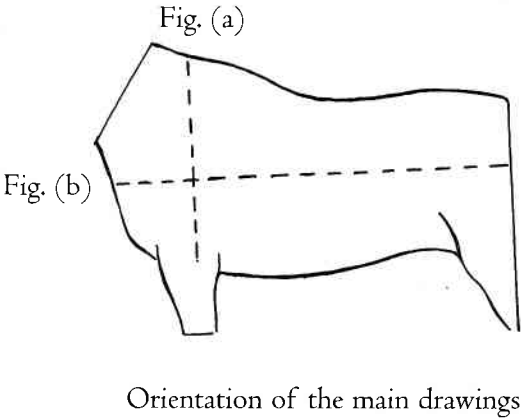


Fig. 58(b) Lung, thoracic and pleural cavities in lateral surface section



ABDOMINAL AND PELVIC VISCERA (Figure 59)

Figs. 59(a) Abdomen in Transverse Section and (b) Abdomen and Pelvis in Frontal Section

(The small drawing shows the orientation of the main drawings.)

On the two main drawings, as appropriate, label:

- A Visceral peritoneum
- B Parietal peritoneum of abdomen
- C Abdominal wall and floor
- D Caudal boundary of abdominal cavity
- E Parietal peritoneum of pelvis

Identify and colour:

- (1) Abdominal roof (lumbar vertebrae and sublumbar muscles)
- (2) Descending duodenum
- (3) Base of caecum
- (4) Right ventral colon
- (5) Caudal vena cava
- (6) Abdominal aorta
- (7) Left kidney
- (8) Small (descending) colon
- (9) Left dorsal colon
- (10) Left ventral colon
- (11) Coils of small intestine (mainly jejunum)
- (12) Body of caecum
- (13) Caecocolic ligament
- (14) Intercolic ligament connecting left dorsal and left ventral colon
- (15) Intercolic ligament connecting right dorsal and right ventral colon
- (16) Great mesentery
- (17) Linea alba
- (18) Liver
- (19) Stomach
- (20) Retroperitoneal component of pelvic cavity
- (21) Spleen

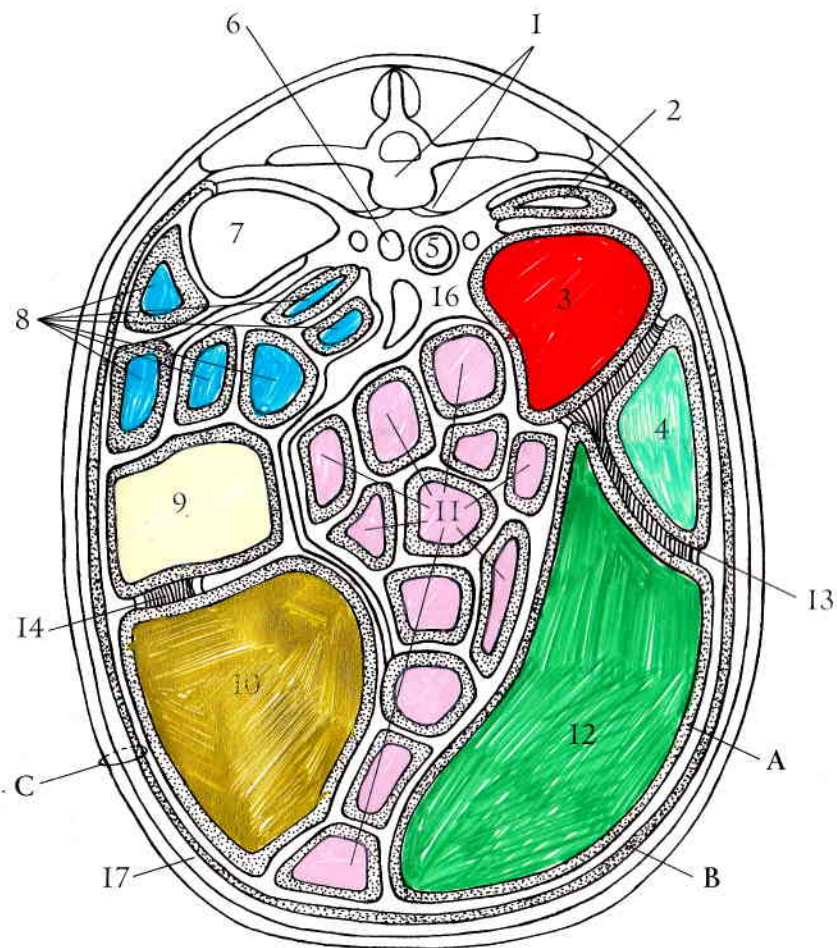


Fig. 59(a) Abdomen in transverse section

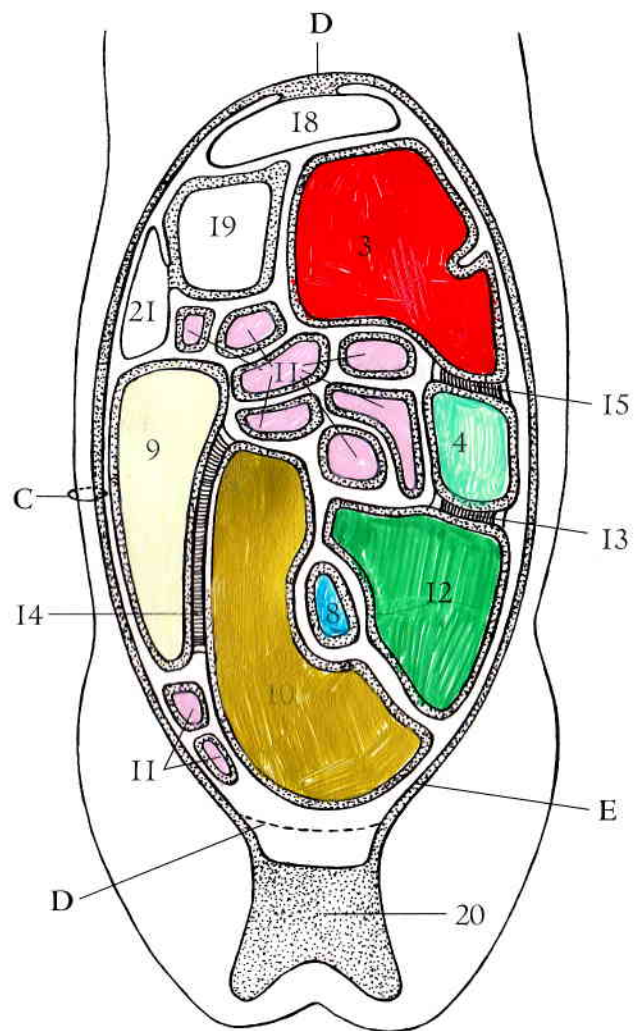
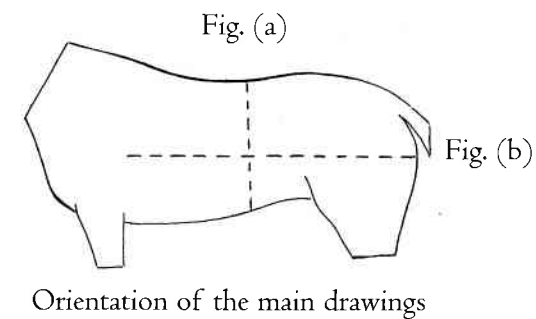


Fig. 59(b) Abdomen and pelvis in frontal section



Gut schema – left lateral view.

Figure 60.

Кишечник лошади, схематично – латеральная поверхность.
Рисунок 60.

A – Anal canal – Анальный канал.

B – Stomasch – Желудок.

C – Dorsal diaphragmatic flexure of colon – Дорсальный диафрагмальный изгиб ободочной кишки.

D – Ventral diaphragmatic flexure of colon – Вентральный диафрагмальный изгиб ободочной кишки.

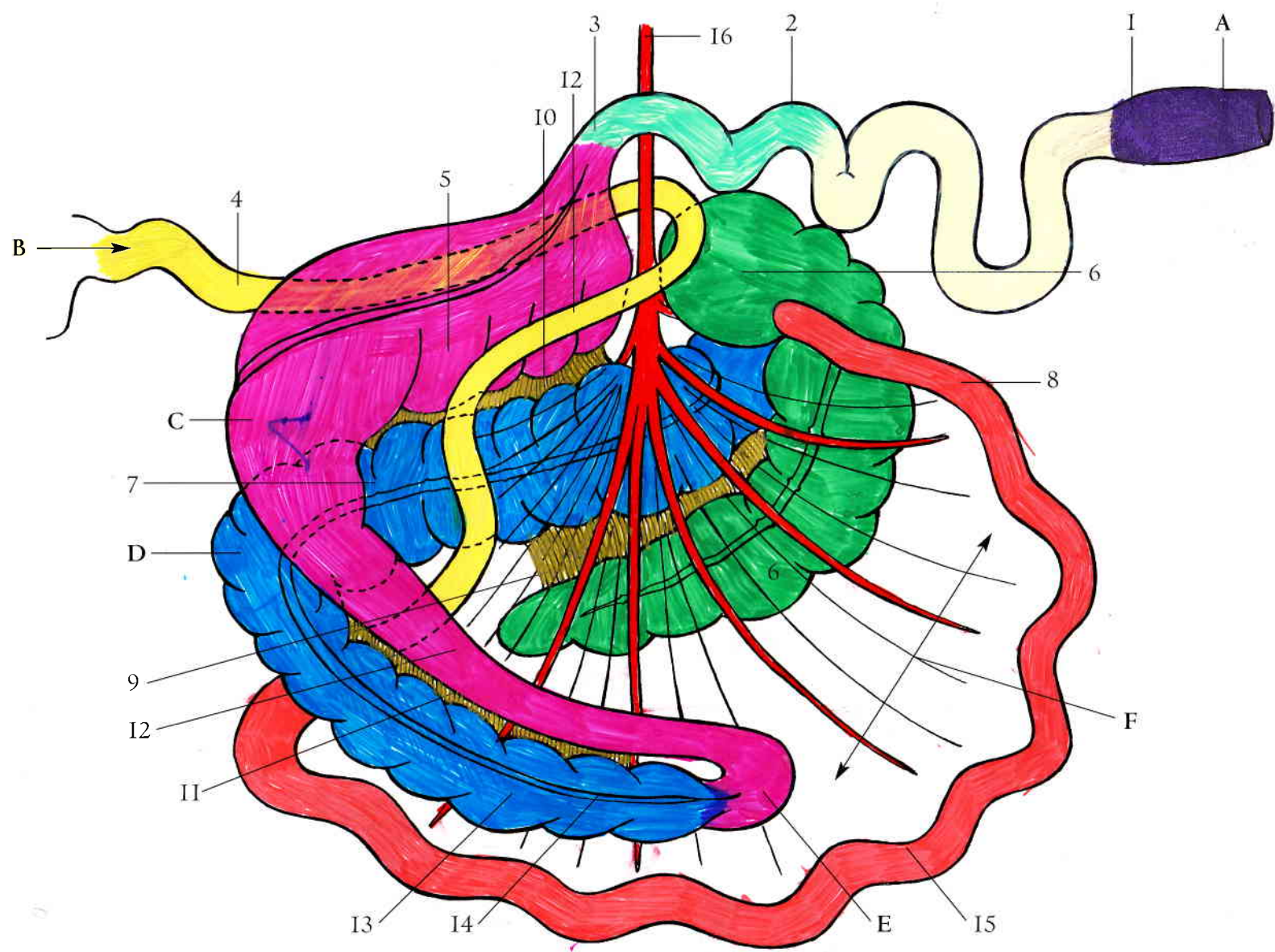
E – Pelvic flexure – Тазовый изгиб.

F – Graet mesentry - Брыжейка тощей кишки.

1. Rectum – Прямая кишка.
2. Small colon (descending colon) – Малая ободочная кишка (нисходящая).
3. Transverse colon – Поперечная ободочная кишка.
4. Descending duodenum – Нисходящая двенадцатиперстная кишка.
5. Right dorsal colon – Правая дорсальная ободочная кишка.
6. Caecum – Основание слепой кишки.
7. Right ventral colon – Правая вентральная ободочная кишка.
8. Ileum – Подвздошная кишка.
9. Caecocolic ligament – Слепо-двенадцатиперстная кишка.
10. Intercolic ligament connecting right dorsal and right ventral colon – Связка, соединяющая правую дорсальную и вентральную ободочные кишки.
11. Intercolic ligament connecting left ventral and left dorsal colon – Связка, соединяющая левую вентральную и левую дорсальную ободочные кишки.
12. Left dorsal colon – Левая дорсальная ободочная кишка.
13. Left ventral colon – Левая вентральная ободочная кишка.

14. Lateral free band of left ventral colon – Латеральная свободная лента левой вентральной ободочной кишки.
15. Coils of small intestine (mainly jejunum) – Петли тонкого кишечника.
16. Cranial mesenteric artery – Краниальная брыжеечная артерия.

FIGURE 60: GUT SCHEMA – Left Lateral View



Thoracic, abdominal and pelvic viscera of the mare – lateral superficial.

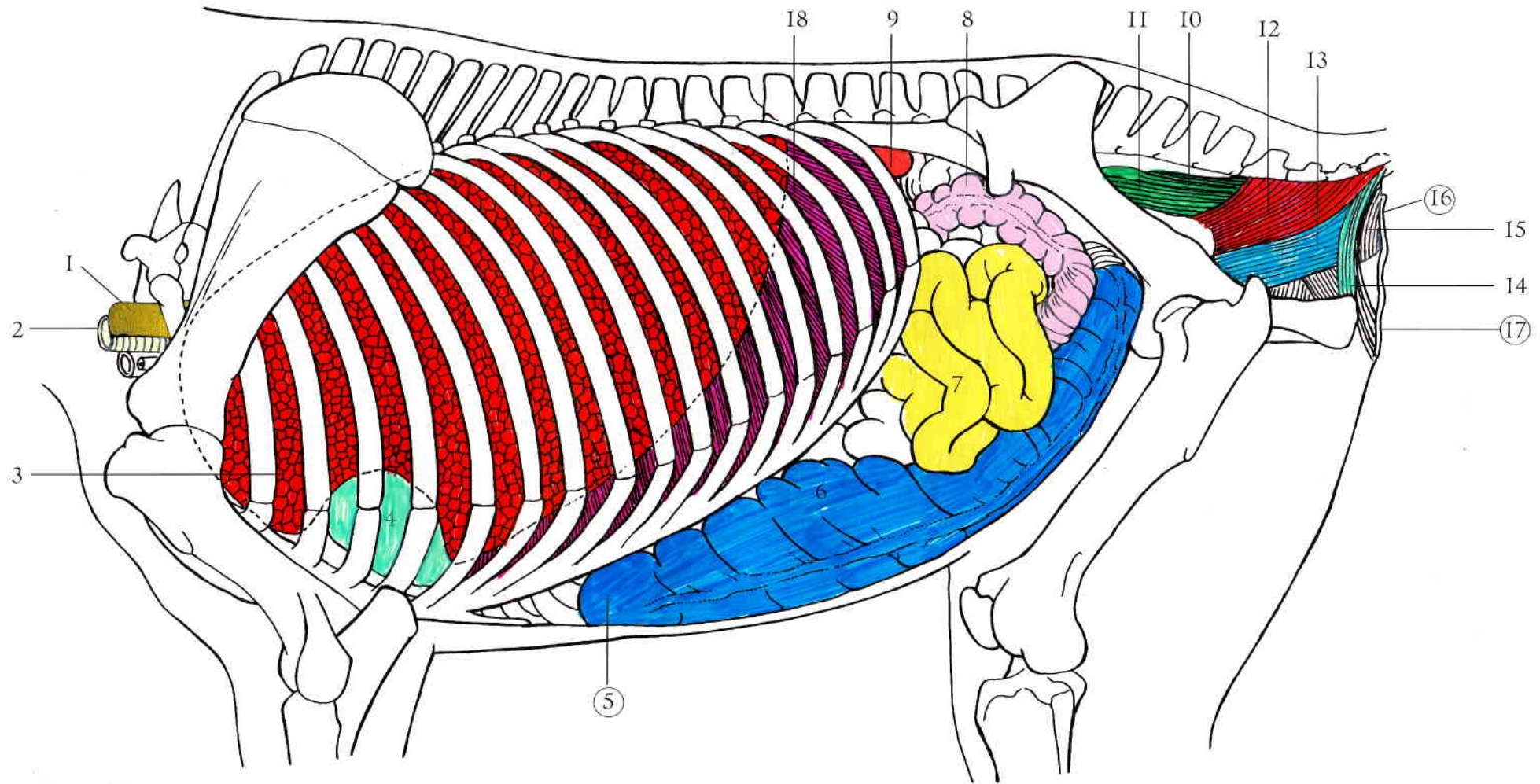
Figure 61.

Грудная, брюшная и тазовая полости кобылы – латеральная поверхность.

Рисунок 61.

1. Oesophagus – Пищевод.
2. Trachea – Трахея.
3. Left lung – Левое легкое.
4. Heart – Сердце.
5. Ventral diaphragmatic flexure of colon – Вентральное диафрагмальное положение ободочной кишки.
6. Left ventral colon – Левая вентральная ободочная кишка.
7. Small intestine (jejunum) – Тонкая кишка.
8. Small colon or descending colon – Малая ободочная кишка.
9. Left kidney – Левая почка.
10. Ventral sacrococcygeal muscle – Вентральный опускатель хвоста.
11. Rectum (interapelvic part of small colon) – Прямая кишка.
12. Coccygeal muscle – Хвостовая мышца.
13. Levator ani muscle – Подниматель ануса.
14. Constrictor vulvae muscle – Конструктор вульвы.
15. External anal sphincter muscle – Наружный анальный сфинктер.
16. Anus – Анус.
17. Vulva – Вульва.
18. Costal muscle fibres of diaphragm – Реберная часть диафрагмы.

FIGURE 61: THORACIC, ABDOMINAL AND PELVIC VISCERA OF THE MARE –
Lateral Superficial View



Thoracic, abdominal and pelvic viscera of the mare – lateral superficial.
Figure 62.

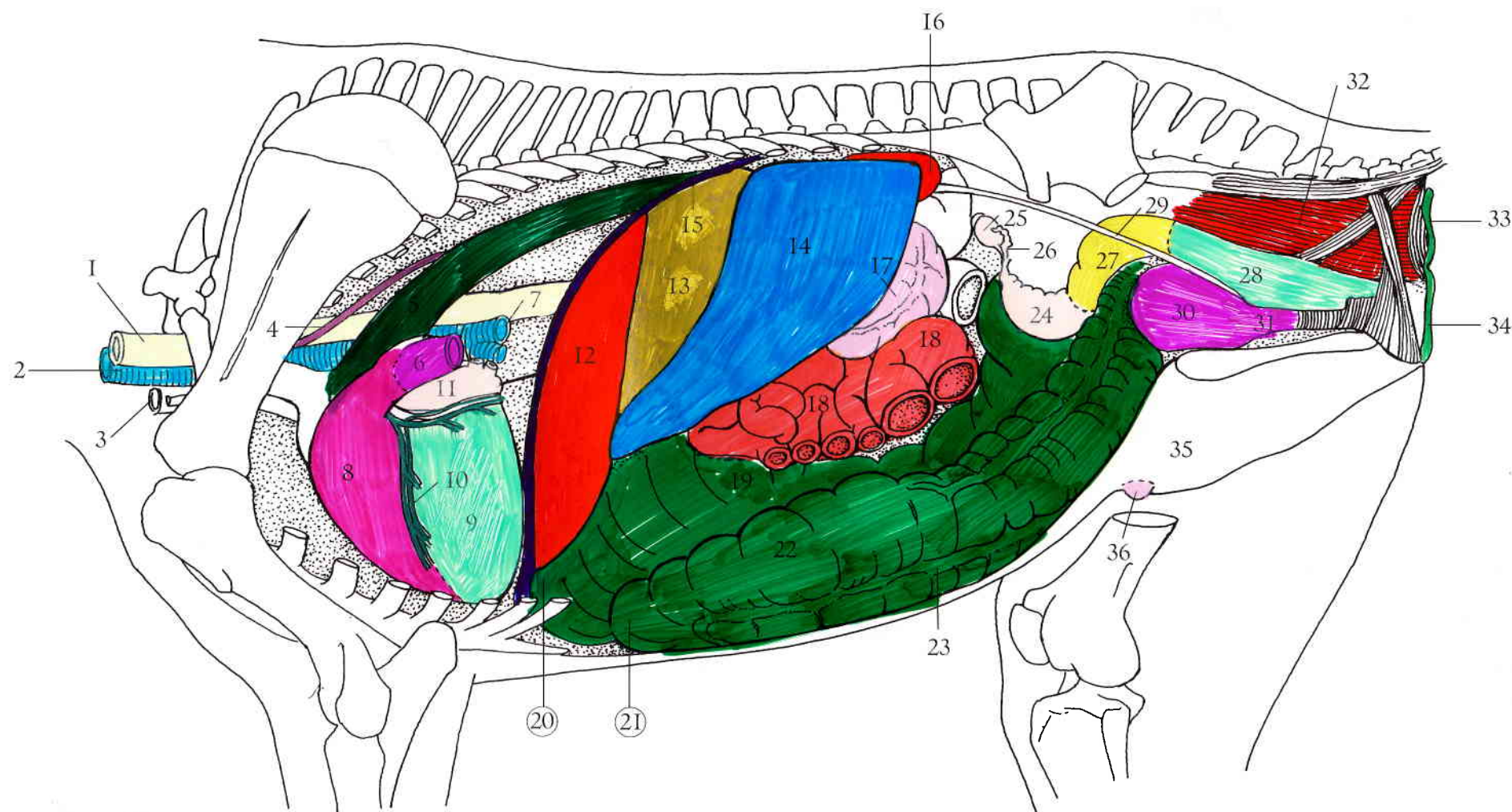
Грудная, брюшная и тазовая полости кобылы – латеральная поверхность.

Рисунок 62.

1. Oesophagus – Пищевод.
2. Trachea – Трахея.
3. Cranial vena cava – Краниальная полая вена.
4. Thoracic lymphatic duct – Грудной проток.
5. Aorta – Аорта.
6. Pulmonary trunk – Легочный ствол.
7. Left bronchus – Левый бронх.
8. Right ventricle – Правый желудочек.
9. Left ventricle – Левый желудочек.
10. Coronary artery and vein – Большая сердечная артерия и вена.
11. Left atrium – Левое предсердие.
12. Liver – Печень.
13. Stomach – Желудочек.
14. Spleen – Селезенка.
15. Diaphragm – Диафрагма.
16. Left kidney – Левая почка.
17. Small colon (descending colon) – Малая ободочная кишка.
18. Small intestine (jejunum) – Тонкая кишка.
19. Left dorsal colon – Левая дорсальная ободочная кишка.
20. Dorsal diaphragmatic flexure of colon – Дорсальное диафрагмальное положение ободочной кишки.
21. Ventral diaphragmatic flexure of colon – Вентральное диафрагмальное положение ободочной кишки.
22. Left ventral colon – Левая вентральная ободочная кишка.
23. Lateral free band of left ventral colon – Латеральная свободная лента левой вентральной ободочной кишки.

24. Left uterine horn – Левый рог матки.
25. Left ovary – Левый яичник.
26. Left fallopian tube – Левая воронка яйцепровода.
27. Body of uterus – Тело матки.
28. Cervix – Вагина.
29. Left ureter – Левый мочеточник.
30. Urinary bladder – Мочевой пузырь.
31. Urethra surrounded by the urethralis muscle – Уретральная мышца.
32. Rectum – Прямая кишка.
33. Anus – Анус.
34. Vulva – Вульва.
35. Mammary gland (udder) – Тело молочной железы.
36. Teat – Вымя.

FIGURE 62: THORACIC, ABDOMINAL AND PELVIC VISCERA OF THE MARE –
Lateral Deep View



Thoracic, abdominal and pelvic viscera of the stallion – lateral superficial.

Figure 63.

Грудная, брюшная и тазовая полости жеребца – латеральная поверхность.

Рисунок 63.

1. Right lung – Правое легкое.
2. Heart – Сердце.
3. Ventral diaphragmatic flexure of colon – Вентральное диафрагмальное положение ободочной кишки.
4. Lateral free band of left ventral colon – Латеральная свободная лента левой вентральной ободочной кишки.
5. Right ventral colon – Правая вентральная ободочная кишка.
6. Base of caecum – Основание слепой кишки.
7. Duodenum – Двенадцатиперстная кишка.
8. Body of caecum – Тело слепой кишки.
9. Lateral caecum band – Свободная полоса ободочной кишки.
10. Apex of caecum – Верхушка ободочной кишки.
11. Right ureter – Правый мочеточник.
12. Vas deferens – Правый семяпровод.
13. Pelvic flexure of colon – Тазовый изгиб ободочной кишки.
14. Urinary bladder – Мочевой пузырь.
15. Seminal vesicle – Пузырьковая железа.
16. Prostate gland – Предстательная железа.
17. Bulbourethral gland – Луковичная железа.
18. Ischiocavernosus muscle – Седалищнокавернозная мышца.
19. Root of penis – Левая ножка полового члена
20. Gracilis muscle – Стройная мышца.
21. Body of penis – Тело пениса.
22. Right testicle, or testis – Правый семенник.
23. Epididymis – Влагалищная оболочка и фасция сперматика.
24. Scrotum – Мошонка.

25. External fold of prepuce – Препуций.

26. Spermatic cord – Семянной канатик.

27. Prepuce – Препуций.

28. Glans penis – Головка пениса.

29. Bulbospongiosus muscle – Луковичнокавернозная мышца.

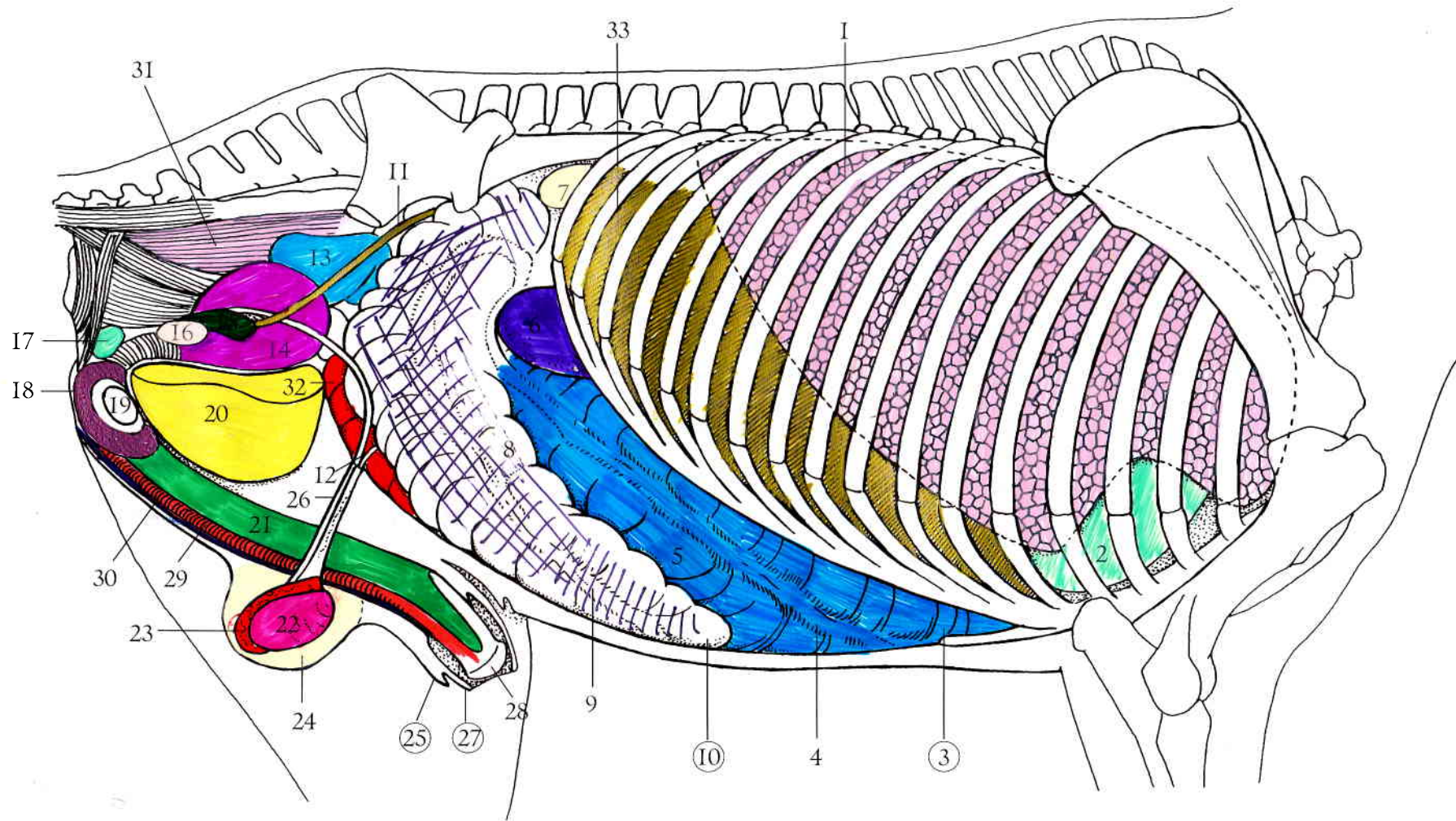
30. Retractor penis muscle – Ректрактор полового члена.

31. Rectum – Прямая кишка.

32. Small intestine – Тонкая кишка.

33. Costal muscle fibres of diaphragm – Реберная часть диафрагмы.

FIGURE 63: THORACIC, ABDOMINAL AND PELVIC VISCERA OF THE STALLION –
Lateral Superficial View



Thoracic, abdominal and pelvic viscera of the stallion – lateral deep view.

Figure 64.

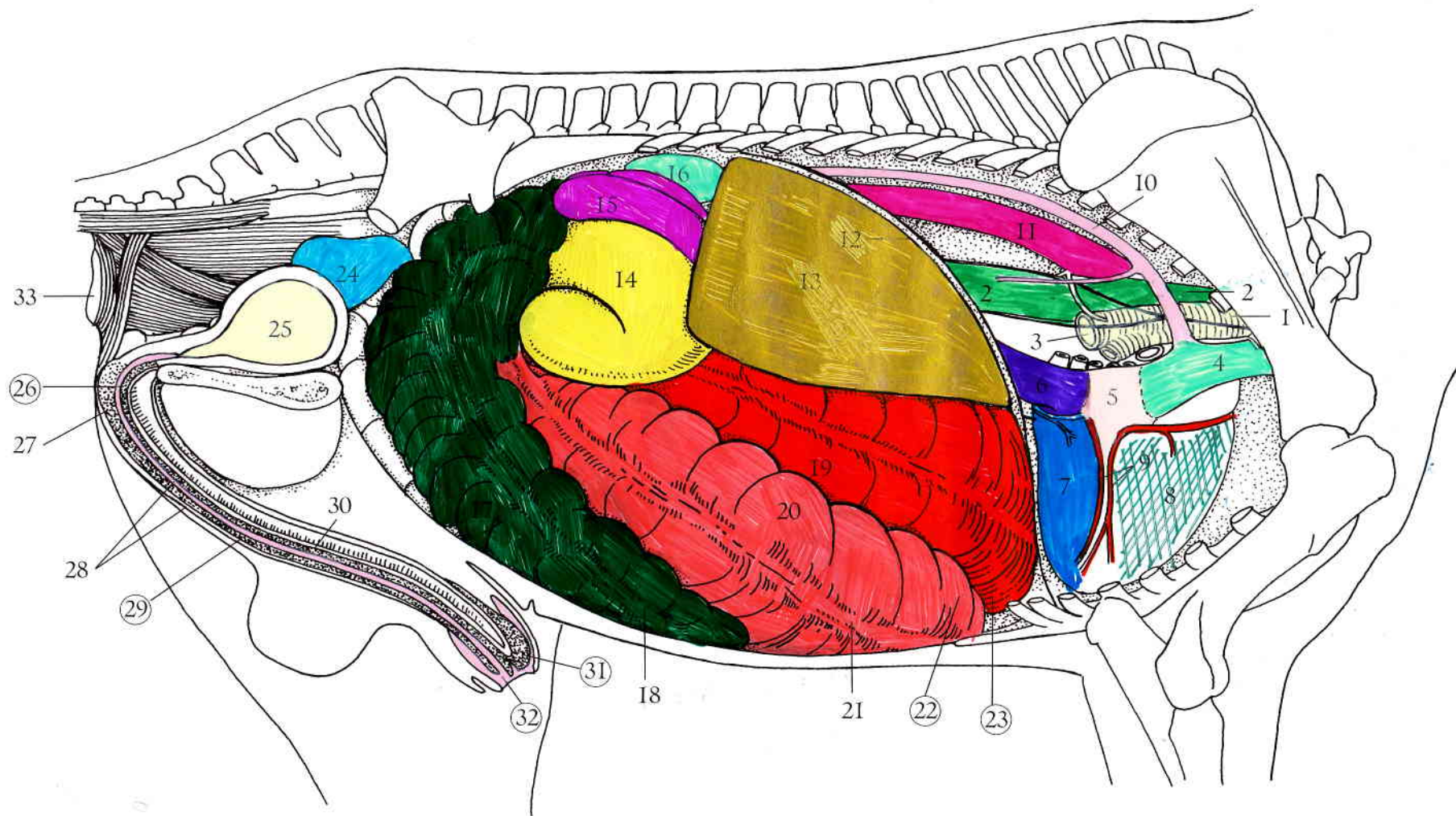
Грудная, брюшная и тазовая полости жеребца (глубокий) – латеральная поверхность.

Рисунок 64.

1. Trachea – Трахея.
2. Oesophagus – Пищевод.
3. Right bronchus – Правый бронх.
4. Cranial vena cava – Краниальная полая вена.
5. Right atrium – Правое предсердие.
6. Caudal vena cava – Каудальная полая вена.
7. Left ventricle – Левый желудочек.
8. Right ventricle – Правый желудочек.
9. Coronary artery and vein – Средняя венечная артерия и вена.
10. Azygos vein – Непарная вена.
11. Aorta – Аорта.
12. Diaphragm – Диафрагма.
13. Right lobe of liver – Правая доля печени.
14. Dorsal sac of caecum – Основание слепой кишки.
15. Descending duodenum – Двенадцатиперстная кишка.
16. Right kidney – Правая почка.
17. Body of caecal – Тело слепой кишки.
18. Lateral caecal band – Верхушка слепой кишки.
19. Right dorsal colon – Правое дорсальное положение ободочной кишки.
20. Right ventral colon – Правое вентральное положение ободочной кишки.
21. Lateral free band of right ventral colon – Грудной изгиб ободочной кишки.
22. Ventral diaphragmatic flexure of colon – Вентральное диафрагмальное положение ободочной кишки.

23. Diaphragmatic flexure of right dorsal colon – Дорсальное диафрагмальное положение.
24. Pelvic flexure of colon – Тазовый изгиб ободочной кишки.
25. Urinary bladder – Мочевой пузырь.
26. Pelvic part of urethra – Тазовая часть уретры.
27. Bulb of penis – Корень члена.
28. Spongy body of penis – Губчатое тело полового члена.
29. Penile urethra – Половочленистая часть уретры.
30. cavernous body of penis – Пещеристое тело полового члена.
31. Glans penis – Головка члена.
32. External urethral orifice – Наружное отверстие уретры.
33. Anus – Анальное отверстие.

FIGURE 64: THORACIC, ABDOMINAL AND PELVIC VISCERA OF THE STALLION –
Lateral Deep View



About the Author

Maggie Raynor is a highly regarded professional illustrator who studied fine art at Sheffield College of Art and the Royal College of Art. Her anatomical drawings have appeared in a number of books on human and equine medicine. She has also provided the artwork for many well-known books on training horses; her own equestrian skills and powers of observation helping to convey the precise detail required. She is the joint author of *Basic Schooling Made Simple* and the humorous work *Equitation – The Truth* and provided all the illustrations for both titles.

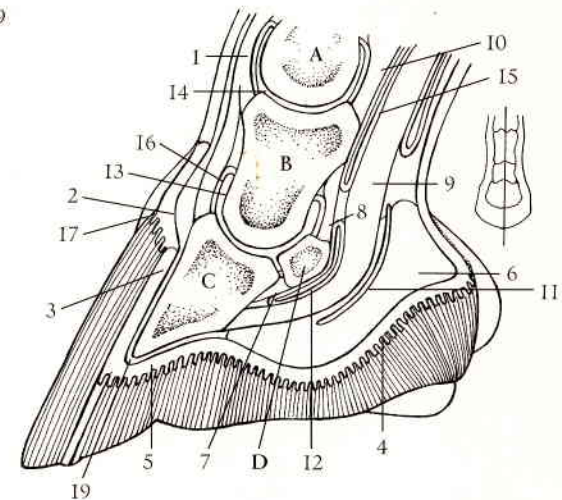
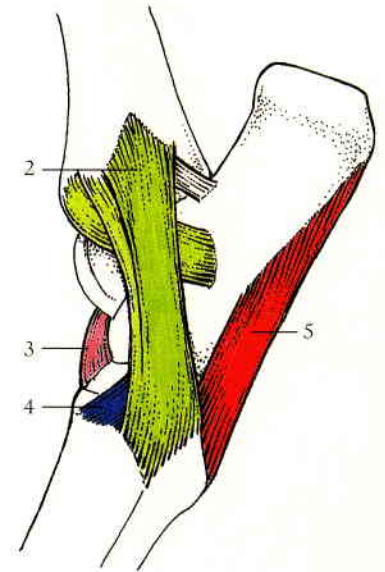
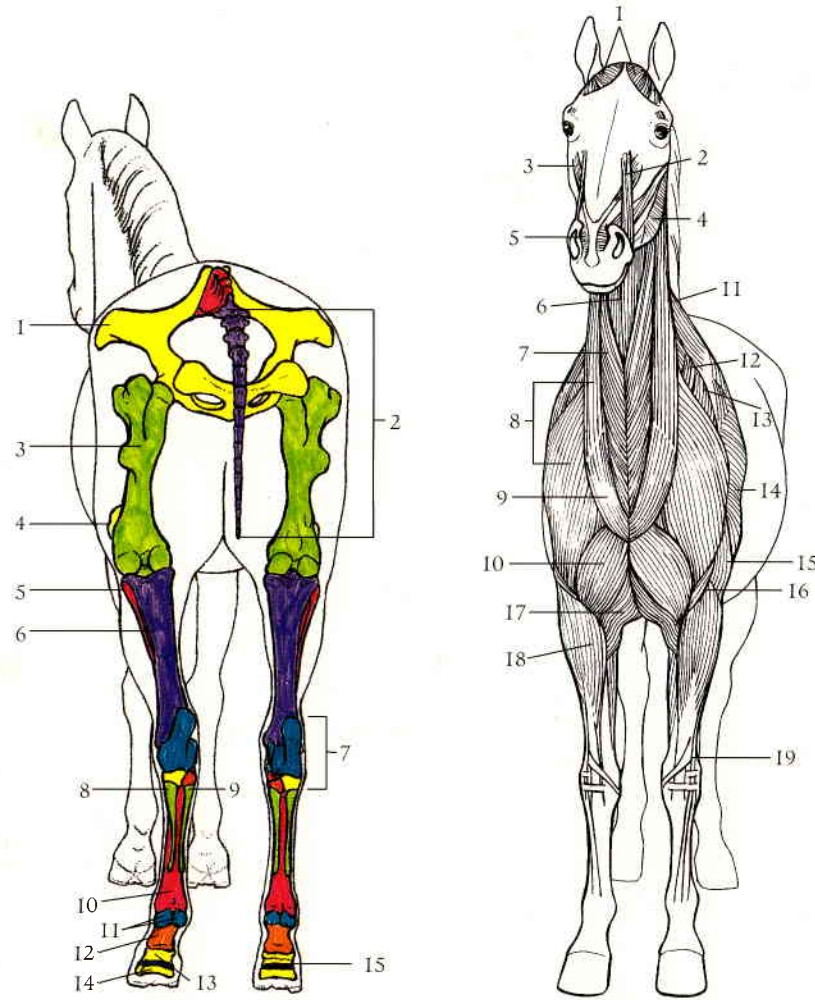
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